DETERMINANTS OF CONTINUANCE USAGE OF E-BANKING IN NIGERIA

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Abstract

Electronic banking aims to provide a more efficient and effective means of delivery of banking services to bank customers through the adoption, implementation and continued usage of the information system and information technologies in the banking sector. These will foster cross boundary financial transaction, and improve cross national trade; and as banks are pace setters for technology and growth in a developing economy they are core to the fulfillment of the Nigerian government's goal of the successful implementation of the cashless policy which was introduced by the Central Bank of Nigeria.

Despite the benefits of the usage of the e-banking system, the percent of Nigerian bank users using the electronic platform is low as less than half of the population have access to the Internet. There are also other factors that determine its continued usage in Nigeria. The study, hence, explored the determinants of the continued usage of e-banking in Nigeria, using the Expectation Confirmation model. The survey for this study was carried out using questionnaires, and the Nigerian students in Universiti Utara Malaysia (UUM) were the respondents. Data were analyzed using IBM SPSS 24.

Three factors; expected service quality, perceived security and perceived privacy were used to determine the expectations of users' priorities to e-banking usage. Their confirmation shows that their expectations of e-banking regarding service quality and perceived security were not confirmed after its usage. Only the expectation regarding perceived privacy was confirmed.

The study further shows that there is a significant relationship between confirmation and satisfaction. Also, there is a significant relationship between satisfaction and continued usage intention, as dissatisfied customers tend to discontinue the use of e-banking. The study concludes that for the successful implementation of the cashless policy in Nigeria, there is a need for the continuance usage of e-banking.

Key words: Continuance usage, e-banking, service quality, perceived privacy, perceived security, Confirmation, satisfaction.

Abstrak

Matlamat perbankan elektronik adalah untuk menyediakan salah satu cara yang lebih cekap dan berkesan untuk memberi perkhidmatan perbankan kepada pelanggan bank. Ini boleh dilaksanakan melalui adaptasi, pelaksanaan dan penggunaan berterusan sistem maklumat dan teknologi maklumat dalam sektor perbankan. Ini akan merangsang transaksi kewangan merentasi sempadan danmeningkatkan perdagangan merentasi negara. Apabila bank-bank bertindak sebagai peneraju teknologi maka akan berlakunya pertumbuhan dalam ekonomi yang membangun. Hal iniakan menjadi teras untuk memenuhi matlamat kerajaan Nigeria dalam pelaksanaan dasar polisi tanpa tunai yang telah diperkenalkan oleh Pusat Bank Nigeria. Walaupun terdapat kelebihan penggunaan sistem e-perbankan, namun peratus pengguna bank Nigeria yang menggunakan platform elektronik adalah rendah. Ini disebabkan oleh kurang separuh daripada jumlah penduduk mempunyai akses kepada internet. Terdapat juga faktor-faktor lain yang menentukan penggunaan berterusan di Nigeria. Oleh itu, kajian dijalankan untuk mengetahui faktor-faktor penentu penggunaan e-perbankan yang berterusan di Nigeria dengan menggunakan model jangkaan pengesahan. Kaji selidik bagi kajian ini telah dijalankan menggunakan borang soal selidik terhadap pelajar Nigeria di Universiti Utara Malaysia (UUM) sebagai responden. Data dianalisis menggunakan SPSS IBM 24. Tiga faktor iaitu mutu perkhidmatan dijangka, tanggapan keselamatan dan tanggapan privasi telah digunakan untuk menentukan jangkaan pengguna terhadap penggunaan e-perbankan. Pengesahan pengguna e-perbankan menunjukkan bahawa jangkaan terhadap penggunaan servis kualiti dan tanggapan keselamatan tidak disahkan selepas penggunaannya. Hanya tanggapan berkaitan privasi sahaja yang disahkan. Kajian ini menunjukkan terdapat hubungan di antara pengesahan dan kepuasan. Di samping itu, terdapat juga hubungan yang signifikasi antara kepuasan dan niat untuk penggunaan yang berterusan, Ini disebabkan oleh pelanggan yang tidak berpuas hati cenderung untuk menghentikan penggunaan e-perbankan. Kajian ini menyimpulkan bahawa untuk menjayakan pelaksanaan dasar konsep tanpa tunai di Nigeria, maka perlunya penggunaan e-perbankan yang berterusan.

Kata Kunci : Penggunaan berterusan ; e-perbankan; servis kualiti; tanggapan privasi; tanggapan sekuriti; Pengesahan; Kepuasan

DEDICATION

This thesis is dedicated to the Almighty, Merciful and Gracious God, The Ever Loving Father for his mercies and faithfulness towards me.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the study

The banking industry has experienced substantial transformations and revolutions in the past three decades. Many factors has been affecting the transitions experienced by the banking industry (Gentle, 1993). The evolution of internet and advancement in technological developments have made the use of the traditional banking system, which made most of the bank customers to carry out transactions in banking halls, to be reduced significantly, especially in the developed countries.

Internet facilities have revolutionized the banking sector in respect to the packaging, transmission and usage of its products and services (Sathye (1999). This has hugely influenced banking industry to adapt the e-banking technique in order to move with the global trend, enhance their efficiency, service quality and customer base.

Electronic banking has therefore evolved over the past few decades due to the emergence of internet (Daniel, 1997). Technology development has also played a huge role in the global transitions from the old traditional system of banking to the present electronic banking system. Many banks in the developed countries and the developing economies have taken advantages of this technological emergence in implementation of the electronic forms of banking system as it provides speedy services in a more efficient and effective ways to the customers.

The Nigerian Banking Industry is not left out of this evolution as the sector has been evolving in the past decade to becoming a 21st century sector, towards actively involving in fulfilling the needs of the people. The banking sector is therefore, referred to as "the trendsetters in adopting IT and as a pocket of Sophistication in Africa" (Anandarajan et. al, 2000).

In order to be actively involved in the economy and financial stability of a country, the banking sector needs to evolve and flow with the global trend. Anandarajan et al (2000) confirmed that for Africa and the developing economies, the banking industry is a big player in expanding their economies to the global markets.

There have therefore, been reformations in the industry to becoming a strong and reliable system in ensuring its effectiveness in playing its developmental roles in the economy of the country, Nigeria, which is referred to as the giant of Africa. In 2004, Prof. Charles Soludo who was the Governor of the Central Bank of Nigeria between 2004 and 2009 confirmed this role of the Nigerian Banking system in the lives of the average Nigerian, the entrepreneur, as well as organizations in order to be involved in the global change which will attract investors into the economy of the country (Soludo, 2004). African business Review confirmed Nigeria as the largest economy in Africa in 2016 with GDP $569 Billion (African Business Review, 2017). The Governor of the Central Bank of Nigeria, between 2009 and 2012, Lamido Sanusi, also confirmed this. That the potential

for growth of the Nigerian economy is huge, but there is need for financial stability which will be contributed hugely by the financial sector and the banking industry.

According to Sanusi (2010), there are eight factors that contributed to the weak financial system in Nigeria, which almost collapsed the economy, these are "1 Macro-economic instability caused by large and sudden capital inflows 2. Major failures in corporate governance at banks 3. Lack of investor and consumer sophistication 4. Inadequate disclosure and transparency about financial position of banks 5. Critical gaps in regulatory framework and regulations 6. Uneven supervision and enforcement 7. Unstructured governance & management processes at the CBN/Weaknesses within the CBN 8. Weaknesses in the business environment".

The factors (Sanusi, 2010) are some of the factors that affected the entire economy causing weakness in the economy and the eventual 2016 recession as alluded by the finance minister, Kemi Adeosun, that "Nigeria is Technically in Recession" (Punch Newspaper, Thursday, July 21, 2016). This was one of the factors that prompted the Nigerian government to putting up regulations to implement the cashless economy which has been introduced in Nigeria since 2012 and it is supposed to take full effect in all the states of the federation, starting October, 2017.

Globally, the financial institutions are naturally compelled to expanding their offerings of electronic banking products due to global growth and development in technology, in order to meet the customers' insatiable appetite for more efficient service. This triggered

many organizations including banks to design websites as to facilitate e-commerce process and banking services electronically. The Nigerian banking sector has also developed its use of technology in banking activities and hugely invested in information technology (Salawu & Salawu, 2007).

In order to meet this increasing demand for e-banking, the Central Bank of Nigeria published guidelines designed to ensure effective service delivery of banking activities. These CBN guidelines, (2003) includes Standards for computer network and internet, standards on protocols, standards on application and system software, standards on delivery channels, Automated Teller Machines (ATM) and internet banking. According to CBN (2003), e-banking is defined as "a means whereby banking business is transacted using automated processes and electronic devices such as personal computers, telephones, facsimiles, Internet, card payments and other electronic channels."

The cashless policy has therefore compelled the banking and other financial institutions to continue to embrace and expand their e-banking platform as all Nigerian banks have already metamorphosed and upgraded from the traditional system to automated system through the use of internet-banking and other electronic banking options (Odumeru, 2012).

E-banking therefore provides the bank customers with easier transaction alternatives without the need to passing through the strain of going to the bank physically, thereby, reducing transportation cost and time spent. Financial transactions which include bill

payment, money transfer, fund transfer, account statements and online payments are easily performed using the electronic banking options (Peter, 2015). Access to banking services is also improved. Electronic banking is therefore a useful tool in e-commerce (Tawfeek, 2003).

Many studies have therefore, attempted to examine the factors that determines the adoption and usage of e-banking, internet banking, mobile banking (Olasina, 2015: Peter, 2015;Altun, 2012; Kasheir et al., 2009; Mavetera, 2007;Cheung, (2001)), they used Technology Acceptance Model (TAM), Unified Theory of Acceptance and Use of Technology Model (UTAUT), theory of reasoned action and theory of planned behavior. From their study, it is discovered that perceived usefulness, ease of use, security and perceived enjoyment are the factor that influences the adoption and use of e-banking.

This study therefore, goes a step further in using the Expectation Confirmation Theory in understanding user intention in continuance usage of e-banking in Nigeria. Continuance here as defined by Merriam – Webster dictionary means permanence. Therefore, this study is examining if the expectation of users regarding e-banking services, security and privacy is confirmed, their level of satisfaction after using it, and their intention to continue using e-banking.

The chapter further discusses the problem statement of the study. The research questions, the research objectives, the significance of this study, scope of the study, definition of key words and the chapter summary are also discussed.

1.2 Problem Statement

From the background to the study, we have seen the growth in technology which has inadvertently affected the banking industry to change from the traditional banking system to a more sophisticated system known as electronic banking. Consequently, the need to carry out this study which examines the factors that influences the Nigerian bank user's intention in continuance usage of e-banking.

In order to move with this electronic banking global trends in information technology, the federal government of Nigeria announced a cash policy which is referred to as the cashless economy that was recommended by the Central Bank of Nigeria (CBN), on January 1, 2012. This cash policy was introduced in order for advancement in the financial transaction system, so as to achieve the Nigeria's vision of being among the first 20 global economies by 2020, to curtail the cost of banking services, to improve financial inclusion by providing higher productive transactions options and greater reach to customers, to improve the capability and efficiency of monetary strategy in regulating inflation, increasing the speed of economic growth and to limit some of the adverse effects of high use of liquid cash in the economy, this comprise the high cost of production of cash, high risk of carrying cash, high subsidy caused by use of liquid cash, high rate of informal economy, inefficiency and high rate fraud, corruption and other fraudulent acts, (CBN, Nigeria https://www.cbn.gov.ng/cashless/; Yaqub et al,. 2013 Standard Chartered Bank, 2012)

The policy took effect in Lagos state in 2012, some states in Nigeria on July 1st 2013. These states are Rivers State, Anambra State, Abia State, Kano State, Ogun State and the

Federal Capital Territory (FCT), Abuja. The policy was expected to be effected on the other 30 states of the federation by 2014, but, it kept being postponed, but, it was further declared that it will be implemented nationwide on October 1st 2017, but, till now, the implementation is yet to be effective (Standard Chartered, 2012; Financial Nigeria, 2017).

Amuda (2016) describes cashless policy as a financial function designed, carried out, and completed without the use of coins or banknotes for money transactions but it was substituted for by the use of credit cards and other electronic means of fund transfer. Financial transactions are consequently implemented without the need or use of cash, and money is spent without its physical mobility. Despite the establishment of the cashless policy, the implementation and effectiveness has been low, due to challenges facing its implementation as many people has not fully embraced its use (Amuda, 2016; Yomere & Gabriel (2015). Also, the illetracy rate is alarmingly high, as alluded by the Minister of Education, Adamu that around 35% of Nigerians are illiterate (Vanguard Newspaper, Thursday, September 21, 2017)

The implementation of the Nigeria's cashless economy is aimed at making individuals and organizations to convert their cash and paper money to bank deposits, holding of money in the liquid form to be significantly reduced, therefore, the economy will be translated from a cash-based system to a cashless system. The risks involved with holding cash in the liquid form are also reduced, hence, reducing physical criminal activities. Hence, this increase the amount of money in the formal economy, thus improving the tax

system, interest charges, and it is a great potential for growth and development of the economy (Osazevbaru & Yomere, 2015).

In order for the successful implementation of this cashless economy, there is need for the acceptance and continuance usage intention of e-banking. As information technology is still at the growth stage in Nigeria as many of the citizens are not yet familiar with the use of new technology (Peter, 2015). According to internet stat (2017), Africa internet users comprises 10% of the world internet users as at 2017, which means, 31.2% of the total African population of 1.2 Billion is using the internet as at June, 2017. Also, only 47.7% of the total Nigerian populations are internet users (Internet Stats, 2017). This is shown in table 1.1.

TABLE 1.1
Internet Users Growth Trend

	Population (2017)	Internet users (2000)	Internet users (2017)	Penetration (% population)	Internet growth % 2000 - 2017	Facebook users
World	7,519,028,970	100%	3,885,567,619	51.7%	100%	1,979,703,530
Africa	1,246,504,865	4,514,400 (16.6%)	388,376,491	31.2%	8,505.1% (10%)	160,207,000
Nigeria	191,825,936	20000	91,598,757	47.7%	45,699.4%	16000

Source: internetworldstats.com/stats1.htm

There is therefore, need to examine the factors that will influence the continuance usage of electronic banking in Nigeria. These are the user's perception regarding their expectation of e-banking prior to its use, how their expectation is confirmed and the how the satisfaction derived from e-banking usage will influence their intention to its continuance use.

1.3 Research Question

The research question for this study includes:

1. To what extent does expectation (expected service quality, perceived security and perceived privacy) able to influence user's confirmation of e-banking usage in Nigeria?
2. Does confirmation of expectation influences satisfaction of e-banking users?
3. Does user's satisfaction affects continuance intention of the usage of e-banking?

1.4 Research Objective

The objective of this study is to examine the factors determining the continual usage of electronic banking in Nigeria from the perspective of users of e-banking. The factors examined by the research include the expected service quality of e-banking, perceived security, perceived privacy, confirmation of these expectation, and satisfaction level of e-banking usage, as the determinants of continual intention to use e-banking. Using the expectation-confirmation theory, the research examines how the expectation by users in terms of service quality, perceived security and perceived privacy is confirmed after usage, which determines the satisfaction of e-banking, which will lead to the intention of e-banking continuance usage. The objectives of the study are therefore stated below:

1. To examine the impact of perceived service quality, perceived security and perceived privacy on users expectation confirmation

2. To examine the impact of users expectation confirmation on satisfaction of e-banking usage
3. To examine the impact of users satisfaction on their continuance intention of e-banking usage

1.5 Significance of the Study

This study examines the continual usage intention of e-banking, it explains the need for the usage of e-banking, because of the growth in technology, and banks are moving from the conventional traditional banking to a more sophisticated virtual system, hence, it comes with loads of benefits both to the bank and the customers. Some of the benefits relate to cost minimization, as the cost of setting up virtual banking is significantly low, compared to the traditional set up of maintaining banking halls.

Customer's transactions are also enhanced in terms of speed and conveniences, access to bank is not bordered by time, because banking activities can be accessed and transactions can be made twenty-four hours daily and seven days every week. But just like a tradeoff, give and take system, in order for the users to enjoy the benefits, there is need to give, what is needed to be given by the users include data, details, and information. Awareness as regards the security and privacy of data given by e-banking users is currently on the increase as users are becoming skeptical as regarding e-banking. The significance of this study is therefore, to examine if the expectation of users regarding service quality, security and privacy are confirmed. Using the expectation confirmation theory, How they are influenced in their continuance usage intention of e-banking.

1.5.1 Theoretical Significance

First, this study contributes to the body of knowledge regarding usage of e-banking, many study have studied on the adoption and usage of e-banking, using the Unified Theory of Acceptance and Use of Technology (UTAUT), Technology Acceptance Model (TAM), theory of reasoned action and theory of planned behavior. This study, hence, expatiate the theoretical understanding of continual usage of e-banking by using an Expectation Confirmation Model (ECM).

Second, this study modified the ECM by choosing three variables (Service quality, security and privacy) that other studies that are ECM based have not used specifically together, to measure the expectation of e-banking users, on which confirmation is made. Satisfaction is therefore directly related to confirmation and decision of e-banking continuance usage is made.

Practical/Social importance: this study contributes practically to banking sector, bank customers, e-banking users, the educational sector, and the body of knowledge, policy makers and the entire public. It reinforce the impact of technology on our actions and behaviours, the need for e-banking system to have a strong privacy protection law, data as well as security of e-banking transaction. From the response of users, the e-banking platform security expectation of users is not confirmed after actual use, and regarding privacy, the confirmation is very low and the service quality is also poor.

This is significant for the bank management to improve on their service quality to the users, improve the security of e-banking transactions and also ensure the privacy of data, in order to make the e-banking users develop more trust in the banking system.

For the education sector, this study contributes to the body of knowledge as it add to the literatures available for students and academics. On the impact on policy makers, this study will enable the government and other policy makers make effective decision by having information regarding some expectations of users regarding e-banking, that as created loop holes in the e-banking system, and preventing bank users from using the e-banking platform, in order for successful implementation of the cashless policy. This will assist them in establishing regulations, laws and rule that will be beneficiary to the population, that will encourage and enhance their use of e-banking, so that they will have trust in the system as per the privacy of their data and personal information as well as allay their fear regarding security of their transactions.

The study also contributes to the entire public as majority are bank users, as regarding the need for e-banking and their protections while using it as well as the service quality that bank management should provide for the users.

1.6 Scope of study

This study is empirical as it identifies the factors that determines the continuance usage intention of e-banking in Nigeria, the need for e-banking cannot be over-emphasized as the world is developing more and more advanced in technology, making electronic transactions unavoidable as transactions are not bordered by region, country or time factor. This extends to examining the expectation of e-banking users in terms of service quality of the e-banking platform, the perceived security expected by the users and the perceived privacy. This will enable the bank management to consider in e-banking platforms. The respondent for the study are the Nigerian students of Universiti Utara Malaysia.

1.7 Definition of key terms

E-Banking - It is the access to banking activities using electronic devices. The electronic channels include the PC, mobiles, internet, automated teller machine (ATMs), and telephone banking.

Continuance usage - It is the process of deciding to continue accessing banking products and continue with the banking services using electronic banking mechanisms.

Satisfaction - It is the affective attitude towards e-banking by the user who interacts with e-banking platform directly.

Confirmation - this exists when the actual experience achieved from the use of e-banking services matches or exceeds the user's expectation.

Expected Service quality - The e-banking user's expectation of the extent of quality of the e-banking products and services.

Perceived Security - The e-banking user's expectation of how they should be protected from risk related to security, their perception regarding what is expected from the e-banking platform in fulfilling the necessary security requirements.

Perceived Privacy - The e-banking user's expectation regarding their ability to control the collection of their personal data and information, and the control on the future use of the information that were collected in order to use the e-banking platforms, and other information generated from their online activities. Privacy is a boundary control mechanism expected by the e-banking users.

1.8 Organization of Study

There are six chapters in this study. The first chapter, Chapter One introduces the whole study. It consists of the background to the study, the problem statement, the research questions, the research objectives, significance of the study, the scope of the study and the organization of the study. This chapter is important as it introduces the reader to the study.

Chapter Two discusses the previous literatures related to the study. It gave an overview of Nigeria as a country, it discusses electronic banking, the global evolution of e-banking and its evolution in Nigeria. The chapter also discusses the theoretical framework of the

study, Expectation- Confirmation Theory. It discusses the variables related to the study in terms of continuance usage intention, satisfaction, confirmation, perceived privacy, perceived security and perceived service quality of e-banking.

The third chapter, shows the conceptual framework of the study, known as the research framework which was developed from the literature review, the research hypothesis were also formed. The fourth chapter, Chapter Four shows the research methodology used for the study. This include the research design, population and sampling procedure, research instrument/questionnaire, sampling frame, research variables, and finally, introduces the statistical tools that is used for the study.

Chapter five shows the data analysis of the study, the explanation for the findings from the statistical analysis and the result for the research hypothesis is contained in this chapter also. The last chapter, chapter six involves the conclusion, discussion of findings, limitation of the study and suggestion for future research. Finally is the summary of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Nigeria

Nigeria is a country in West Africa and it is generally referred to, as the giant of Africa. From the Nigerian Bureau of statistics, the last census till date was in 2006 and the population was discovered to be 140million (National Population Commission, 2006), since then, the Nigerian population have only been estimated. According to World Bank and data from the United Nations Census Bureau (2016), the population of Nigeria in the year 2016 was 186 million. This makes Nigeria the country with the largest population in Africa, and the Central Intelligence Agency population estimates, based on information from the US Bureau of the Census shows that as at July 2017, the population of Nigeria was estimated to be above 190 million making it to attain the status as the seventh most populated country in the world (CIA, 2017).

The country Nigeria is officially known as the Federal Republic of Nigeria. Nigeria comprises thirty-six states and the Federal Capital Territory (FCT) in Abuja. The major economic center is Lagos. Nigeria has a rich land of diverse cultural and traditional ancestry with over and above 250 distinct ethnic groups. According to world economic forum (2017) Nigeria is the third country in the world with the most spoken languages of 707 spoken languages although the official spoken language in English.

Figure 2.1 is the map showing geographical location of Nigeria. Nigeria is situated on the uttermost inner corner of the Gulf of Guinea on the west coast of Africa and occupies

between latitudes 3°15’ to 13°30’ N and longitudes 2°59’ to 15°00’ E. Nigeria occupies a land mass of 923,768km2, the length from the extreme North to the extreme South is 1,046km and its full scale breath from East to West is 1,127km with a total boundary length of 4900km (Federal Republic of Nigeria, 2016). Nigeria is bordered in the south by the Bight of Benin and the Bight of Bonny, which are both part of the Gulf of Guinea. It is bordered in the north by Niger Republic, Benin Republic in the west, Cameroun in the southeast and Chad in the north - east.

FIGURE 2.1

The Federal Republic of Nigeria Map

2.2 Electronic Banking

2.2.1 Definition of E-Banking

Electronic banking is described by The Central Bank of Nigeria CBN (2003), as the banking activities implemented and completed using automated procedures and electronic mechanisms. These include personal computers (PCs), telephones, facsimiles, the internet, card payments (debit, credit and other cards) and other electronic mechanisms.

Electronic banking as defined by Daniel (1999) refers to the process of administering of banking services to customers through the internet as the medium of communication. This include mobile banking, fund transfer, e-payment, ATM and credit/debit card (Odumeru, 2012). Peter (2015) defines it as the process of accessing and manipulating accounts and performance of transaction through the internet using mobile devises, personal computers as well as other web-based applications.

E-banking therefore, is the access to banking activities using electronic devices. It is the employment of electronic mechanisms, devises, tools and equipment as delivery channels of banking products and services to customers and it is a sub-division of electronic finance (Furst Lang and Nolle, 2000). The electronic channels include the PC, internet, automated teller machine (ATMs), and telephone banking.

E-banking includes internet banking, Telephone banking and PC banking. Internet banking refers to the banking services conducted over the internet while pc home banking

refer to banking services conducted over the PC via the installed bank application, this means the banking services can only be done using the installed proprietary software, while internet banking is browser based (Deutche Bundesbank, 2000).

According to Citron, (2010), internet has two distinct faces, the first is the one that enables and promotes opportunities for users to relate, connect, transact and network. The other face restricts people, in partaking maximally in the online environment. Just like the trade-offs rules, so also is the use of the electronic devises, this allows users to gain and benefit from the services, but also, before users can benefit substantially, there is need to give, what is given is the personal data and information. The risk associated with giving these information is increasing on the daily basis and threats regarding security of transaction and protection of user's data is increasing.

2.2.2 History of Electronic Banking

E-banking started in the United States in the early 1980s, specifically, in New York. Citi Bank, Chase Manhattan, Chemical bank and manufacturers Hanover banks were the earliest banks that started using home banking service through the use of videotext system. This was extended to the United Kingdom in 1983, as bank of Scotland became the first bank in UK to provide home banking service, through the use of Prestel system. The system was known as Homelink as customers were able to pay their bill, make transfer and view their bank statements online.

In 1994, Stanford Federal Credit Union was the earliest financial institution to provide a more sophisticated internet banking system to service all of its members. Presently, almost all banks have electronic banking services available to all of its users, and, as the rate of the internet users has been increasing, the rate of the e-banking users has been increasing also.

As at 2013, there were already 2.4 billion users of internet around the globe (internet world stats, 2013), this means, a huge percent of these will be users of electronic banking services and in 2017, there are over 3.8 billion users of internet in the world (internet world stats, 2017).

2.2.3 E-Banking Establishment

E-banking can be established as an independent bank, a virtual bank with a license from the banking and financial regulators. Example is the Security First Network Bank which is the first independent virtual bank. It can also be established by existing banks as separate entities or as an independent operating division without a separate entity. What is traded by e-banking is known as e-money, instead of the traditional cash that is used as transaction under the traditional banking settings (Bartholomew et al., 1997).

Michael Karlin described the summed up idea of e-banking. He is the President and Chief Operation officer of the first virtual bank in the world (Security First Network Bank). His description and complete summary of the idea of e-banking include: (1) All transactions are done virtually on the bank server via the internet, hence, no need for users to purchase

softwares, it is not compulsory to install software too, so, no need to save data relating to the banking transaction on computers and mobiles (2) Banking services can easily be initiated and completed anywhere the user is, as long as there is access to computer and internet devises. (3) Banking services can be enjoyed at all times, anytime the user wants to access it, no holiday, no break time, no weekend, as it works twenty-four hours daily, seven days each week and through the year. No need for users to manually track cheques, bank statement and ATM card too.

E-banking can also be established as an independent or dependent section under a physical bank. This is the most common e banking establishment and it is the development of traditional bank in servicing variety of customers and reducing the number of physical branch offices. Hence, most banks have the electronic settings, this include the online banking sites, mobile banking applications, ATM centers and other electronic means. These are run and managed concurrently with the physical bank branches.

2.2.4 E-Money

Electronic money, generally known as e-money has been used as a means for financial transactions namely financial payments for more than two decades ago (Popovska-Kamnar, 2014). It was described by the United States Department of treasury (1996) as the system that evolved due to advances in communication technologies and it accounts for retail transactions, electronic fund transfer and electronic wholesale payments.

E-Money as defined by BIS (1998) is "stored value or prepaid payment mechanisms for executing payments via point of sale terminals, direct transfers between two devices, or over open computer networks such as the Internet". European Central Bank (ECB, 2017; ECB, 1998) defines electronic money as "electronic store of monetary value on a technical device that may be widely used for making payments to undertakings other than the issuer without necessarily involving bank accounts in the transaction, but acting as a prepaid bearer instrument".

According to Bank of Canada discussion paper by Fung et al, (2014), e- money is a digital alternative to cash and its scope is wider as used for variety of electronic transaction. There are three elements of e-money. The first is, it is a liability on the issuers. The second is e-money is prepaid and the third is its multipurpose means of payment, this includes point of sales (POS) transactions, paypal transactions, credit cards, and other cards.

Popovska-Kamnar, (2014) classified e-money into hardware e-money and software e-money. The hardware e-money is when physical cash or is transferred into a physical card, this is very similar to the credit and debit cards, it includes the parking ground cards, transportation cards and other types of cards used for daily transactions. The card is not linked with any bank account but with the value of money on it. The card is mostly used for small payments and there is no data about the owner. The Software e-money is the transfer of e-money using the telecommunication network or the internet and the money is stored on the server. This means the money is not stored on the chip of the card but on the server of the e-money based. Example includes Paypal and DigiCash..

2.2.5 Benefits of E-Banking

E-banking is the adoption and implementation of information technology concepts in banking services, this includes the integration and automation of procedures, data and information generation and production using computers, mobile phones, softwares, ATM, credit and debit cards (Adewuyi, 2011). This therefore improve the information flow in the banking system, this aids strategic, tactical and operational decision making, regarding the bank management and delivery of services to customers.

The use of information and communication system in the banking sector enables the bank to survive in the present technological environment (Wohorem, 2000). The delivery and service system enables the bank to meet the needs of the customers in more efficient and effective ways.

Customer care is hence, improved and self-service system for bank customer is enhanced. This makes transactions raging from opening of bank accounts, checking information regarding the bank accounts, information regarding credit and debit cards to be easily accessed by the bank customers.

Telephone banking allows the customer to access the bank service through phone calling of some specific numbers dedicate for such transactions. Account balanced enquiries can be done, account numbers can be confirmed, authorized money transfer can be done and transactions alert can be gotten through the phone.

E banking is also cost effective as the cost of establishment is quite low compared to the cost involved in setting up physical bank branches. According to, the running costs of

traditional banks is between 50% -60% of its total revenue, while the operating cost of internet banking is mere 15% - 20% of its revenue.

Electronic banking also assist the users in transacting from anywhere in the world without experiencing location constraints. It reduces the workload of the staff and reduce the cost of workforce. E-banking offers alternatives that reduce the congestion and queuing at the traditional banking halls and ATM points.

Idowu, (2005) and Adewuyi, (2011) summed up these benefits into three: benefits to the bank, benefits to the customers and benefits to the economy. Benefits to the banks includes Facilitation of decision making, availability of essential information at finger tips, improved service delivery, new product development, savings in space and running costs and relevance among leagues of global financial institutions. The benefits to the customers include: Quality service enjoyed, reduction in time spent in banking halls, confidentiality, bank statement and balances obtained with ease, 24 hours service, and bank account accessibility anywhere in the world. The benefits to the economy includes: creation of jobs and specialization, improvement in commerce, technological development and data bank for national planning.

2.2.6 E-Banking in Nigeria

The history of e-banking in Nigeria as described by Adewuyi, (2011) can be traced back to 1986, as regard the Structural Adjustment Programme (SAP) which was launched by the Babangida administration and in 1990, the first automated teller machine (ATM) was launched by the Societe Generate Bank. The increasing need for e-banking led the Central Bank of Nigeria (CBN) to the establishment of guidelines on e-banking in 2003.

According to The Central Bank of Nigeria CBN (2003), as concluded in the Report of Technical Committee on e-banking, electronic-banking is described as the banking activities implemented and completed using automated procedures and electronic mechanisms. These include personal computers (PCs), telephones, facsimiles, the internet, card payments (debit, credit and other cards) and other electronic mechanisms. The financial institutions are therefore, compelled to expanding their offerings of electronic banking products due to global growth and development in technology, in order to meet the customers insatiable appetite for more efficient service. (Salawu & Salawu, 2007).

These CBN guidelines (2003) includes Standards for computer network and internet, standards on protocols, standards on application and system software, standards on delivery channels, Automated Teller Machines (ATM) and internet banking. The advent of e-banking has therefore opened greater opportunities for individuals, firms and financial institutions as it is beneficial to both banks and customers. It provides cost – saving channel for the banks dispensing their operations effectively, the cost of workers has also significantly reduced, and customers enjoys freedom in transacting their

financial activities anywhere, stress of queuing in the banking hall is significantly reduced as time and cost are minimized (Adesina & Ayo, 2015).

Hence, to fully maximize the use of e-banking, the government implemented the cash policy which is to be effected in all states of the federation by October 2017, the cash policy is on cashless economy. Therefore, bank users will be compelled to use internet banking.

But despite this, many bank users are not using e-banking as at present, this is due to the factors inhibiting its use which include the perceived security as users are risk averse and do not want to lose their money. In addition, some users do not know how to effectively use the e-banking services and perceived privacy issues as users do not want to disclose their personal data online (Ezeoha, 2005; Adesina &Ayo, 2015).

2.3 Expectation-Confirmation Theory

This research overarching theory rests on the Expectation –confirmation theory (ECT). This was postulated by Oliver (1980) as a five phases to a customer creating a repurchase intention. The first phase focuses on customer having an initial expectation from a product or service before its purchase. The next phase shows the consumer acceptance and usage of the product or service, this is like the process of trial pf product or service performances. The third phase is a stage of assessment. The expectation prior to purchase and usage are assessed based on the actual experience; this shows the derived benefits and customers expectation is confirmed. The fourth phase shows the satisfaction of consumers based on the confirmation level. And the fifth phase reflects the repurchase intention of a satisfied costumer, while the customers that were not satisfied can discontinue the use of the product or service and change to alternative products.

Previous studies on e-banking has used other theories, study based on ECM model for e-banking is very limited. Chan, (2001), researched on the "adoption and continual usage behavior towards internet banking in Hong Kong", using technology acceptance model and social cognitive theory, the result from the research revealed that both subjective norm and computer self-efficacy assume a huge role in influencing indirect adoption of internet banking. On e-banking adoption, the result reveals that perceived usefulness has significant effect on intention to adopt. It is also discovered that perceived ease of use has significant effect on continual usage intention of e-banking.

Mavetera (2007) used Technology Acceptance Model (TAM) in "Determining the issues affecting adoption and continuance usage of internet banking in South Africa". The result from the study shows that internet security is the major factor co attributing to internet banking adoption and its continual usage.

Kasheir et al. (2009), examined the "factors affecting continued usage of internet banking in Egypt", using the Technology Acceptance Model (TAM), theory of reasoned action, theory of planned behavior and the diffusion of innovation theory, discovered that perceived ease of use was found to be the strongest predictor of intentions to continual usage of e-banking.

Altun, (2012) researched on the "Factors affecting the use of internet banking in Cyprus". The research concluded that security had the highest influence on the customer's use of e-banking.

Peter, (2015) and Odumeru (2012) attempted to research the "Determinants of acceptance of e-banking by customers in Nigeria", by using a modified technology Acceptance Model (TAM). It is discovered from the result of the study that acceptance of e-banking in Nigeria is significantly influenced by security, age, educational background, income, perceived income, perceived benefits, perceived ease of use, perceived risks and perceived enjoyment.

Olasina (2015), using the Unified Theory of Acceptance and Use of Technological Model, on the "Factors influencing the use of mobile banking by academics", discovered that customer service and perceived ease of use influence the use of mobile banking.

This study is therefore, using a different model, which is not commonly used in accessing the continuance usage intention of e-banking, this is the Expectation Confirmation Model (ECM). This model will be used to check how expectations by users, prior to the actual use of e-banking are confirmed. The expectations for this study are expected service quality of e-banking, perceived security and the perceived privacy of e-banking. How the expectations are confirmed and the level of satisfaction derived from the usage of e-banking, this will form their intention to continue using e-banking services.

2.4 Continuance Usage Intention of E-Banking

Expectation Confirmation Theory (ECT) is a theory used in behavior and marketing literature to explain post consumption behaviour (Oliver 1980). The use of Expectation Confirmation Model (ECM) is therefore, applied as the theoretical foundation of the study. ECM of continual usage of e-banking is developed for this study in addition to the original construct of ECM, this study proposed that expectations as regarding service quality, perceived security and perceived privacy should be included into the unique context of e-banking use.

Continuance intention to use is the customer's perception of the value of product and service which form their repurchase intention towards the product or service (Hsu et al.,

2014). It is the process of deciding to continue doing a business, repurchase products and continue with the services from the same organization, becoming a loyal customer, rather than moving to a competitor (Abbas & Hamdy, 2015).

For information system usage, adoption of the system is merely the initial stage, while the decision to repurchase and continue product or service usage will determine the long term success of the system. A system whose repurchase intention and continuance intention by customer is low is deemed to fail, the value of the system will reduce and it is more liable to abandonment for other alternative means (Alanazi, 2013). For this research, continuance intention to use is therefore, the users intention to continue using e-banking in the foreseeable future.

2.5 Satisfaction

Only satisfied user will decide to continue the usage of a product or service. According to Doll et al., 1991, Satisfaction refers to "the affective attitude towards a particular computer application by an end user who interacts with the application directly". Based on ECM, the level of satisfaction from the past usage of a product or service will determine the user's intention to continue a repurchase action Halilovic & Cicic, 2013). Ortiz & Markus, (2009) explained that satisfaction is dependent on two contruct, thes re the expection of the information system and confirmation of expectation after initial usage. Lin et al (2014) argued that the main factor that will determine and influence the customer of a product or service to decide on repurchasing it, is satisfaction.

Satisfaction influences IT/IS continual usage (Bhattacherjee, 2001), mobile service usage (Chen et al., 2013), system success (Wixom & Todd, 2005), mobile instant applications Ogbuma at al., 2015) attitude toward a technology (Bhattacherjee & Premkumar, 2004), technology acceptance (Wixom & Todd, 2005). With many alternative applications available, a dissatisfied customer can easily shift from one alternative to another without much switching cost (Ogbuma et al., 2016: Deng et al., 2010). Only satisfied customer will therefore choose to continue using a choice (Deng et al., 2010). Therefore, the more satisfied the customers are, the higher the choice of the continuance usage of the current e-banking choice.

2.6 Confirmation

Confirmation exists when the actual experience achieved from the use of a product or service matches or exceeds the user's expectation. From the cognitive Dissonance Theory (Festinger 1957), users may experience cognitive dissonance (conflicting attitude) if their pre-acceptance usefulness of a particular product or service is disconfirmed after the actual use.

Thong et al., (2006) affirm that confirmation is positively related to satisfaction. This was also supported by Vankatesh et al. (2011). Confirmation is assessed by users based on their evaluation of the expectation, to determine their level of satisfaction. Expectation here is defined as "an individual's self-reported subjective probability of his or her performing a specified behaviour, based on his or her cognitive appraisal of volitional and non-volitional behavioural determinants" (Venkatesh et al. 2008)

2.7 Perceived Security

The growth in technology has accounted for the increase in the use of internet and other electronic means of transactions of activities by individuals and organizations. Large volume of data is thereby being transmitted daily and the capacity for data storage, retrieval and monitoring is also increasing alarmingly (Mekovec & Hutinski, 2012).

Perceived Security is therefore, the e-banking user perception of how they are protected from risk related to security (Mekovec & hutinski, 2012). It is the perception of e-banking users that the platform will fulfill the necessary security requirements (Kim et al., 2008).

Yenisey et al. (2005) explained Perceived security in two ways, this is the perceived operational factor and perceived policy related factor. Perceived operation factors are the actions that can be taken into focus by the bank management to ensure users have the feeling of being safe and secured during electronic transactions. These measures include blocking of unauthorized access, distinct individual login name and login password authentication, emphasizing users compliance with security procedures, encryption strategies and collaboration with electronic security vendors.

The perceived policy – related factors include the emphasis of the electronic mechanism on network security, bank management commitment, increased efforts in creation of awareness of security procedures to users, keeping the e-banking platform up to date with

services, products and policy standards, ensuring security in file transfer and security in web browser, applications and other e-platforms.

Belanger et al., (2002) in their research on trustworthiness of electronic commerce concluded that based on respondents response, security features is the most valued features for the continuance usage of e –commerce. Security is therefore a credibility measure. Security, according to Wang et al. (2003) is a level of assurance that a particular transaction will be performed without any security breech.

The perceived security of e-banking is therefore one of the major factors that accounts for majority of non – users of e-banking unwillingness to use the services (Pikkaraine et al., 2004). Because of this security issue, many users prefer to use non internet alternatives of e-banking like the ATMs instead of the internet options (Hanafizadeh et al., 2014).

Therefore, in order to increase the bank user's confidence in e-banking, they should have confidence that their activities are secured. The banks should therefore provide mechanisms that control the access to their stored data (Ye & Zhong, 2011). As technology is advancing, more and more information about individual and users are being collected, this is not limited to e-banking, but spreads its tenets to all other information technology system this include e-government, e-learning services, e-health, online shopping, e-commerce and other electronic means of information system (Mekovec & Hutinski, 2012).

Eurostat's (2010) in their research explained that 35% of their respondents do not use online service due to issues related to security of transactions. This is because increase in awareness of the security measures that should be implemented for the users of e-services is increasing, therefore, users can refuse to use the e –services that do not meet their specification for security and that doesn't meet their expectations in other areas like the service quality and privacy rights.

2.8 Perceived privacy

Privacy is seen as a boundary control process, where a person defines who he will interact with and what type of information to disclose during interaction, it allows the person to achieve the desired level of interaction with others, at a given time according to stated conditions (Mekovec & Hutinski, 2012). Privacy, according to Wang et al. (2003) is the protection from the collection of various data during bankers interaction with a bank, privacy is also a credibility mechanism as it fosters user's protection.

Online privacy as defined by Scott (2004) is the "exchange of internet user's personal information for some benefits". Online privacy is therefore connected with information privacy, and it focus on the interest of the users regarding their capacity to control the collection of their personal data and information in order to control the future use of the data and information collected or the information generated, based on their online activities This is because technology has a huge effect on privacy, as collection of data from individuals is made easier, digitalized information generally cannot be deleted, so all digital activities of people exists in perpetuity and now, there is increase awareness

among users as regards the lack of privacy protection of their data which can lead to invasion of their privacy (Mekovec & Hutinski, 2012).

Hann et al. (2007) grouped individuals regarding privacy into three categories. These are privacy guidance, the information seller and convenience seekers. The individual that falls under the privacy guidance are very concerned and careful about giving out their information, information privacy is topmost in their mind when disclosing data and information. The individuals under the privacy seller group are not careful about privacy of information and are willing to disclose data and information for a small reward. The category of individuals that falls under the third group, convenience seekers are basically focused on the benefits that will be derived from disclosure of data and information.

The e-banking users information collected during electronic activities are therefore grouped into three (Challeppa & Sin, 2005). The first one is the anonymous information, these are automatically generated and includes the IP address of the computer used and the type of e-banking mechanism used for transaction. The second is personal non-identifying information regarding age, gender and other demographic information. The third is the personal identifying information regarding name, email address, login details, telephone address, credit card number and other information specific to the e-banking user.

From the research of Ashworth and Free (2006) regarding electronic business risks, the top risks identified through the respondent's response is profitability risk, security risk

and privacy risk. The researchers found that the trust in using electronic means is increased with higher privacy and security concerns, the relationship between trust in internet and online purchasing attitude weakens users with higher privacy and security. Eurostat's (2010) confirmed from their research that 30% of their respondents avoid the use of online services due to privacy issues regarding loss of personal data. Mekovec and Hutinski (2012) also confirmed that individuals hesitate to use services conducted electronically due to their suspicion pertaining to the level of their privacy protection, they further elaborated on that if electronic users are convinced that there is security of data and privacy of information, their expectations will be confirmed and they will be more satisfied with the overall electronic services.

2.9 Perceived service quality

Chou et al., 2010) refers service quality as the "perception of users of the superiority of a service". It is the difference between user's expectation and the actual performance of the quality dimension of the product or service (Jiang et al., 2002). Lai, (2004) refers to service quality as the most important predictor of use in the service industry. He explained further by explaining that, as a perception component, service quality measures the quality performance of a service provider without relying on the entire system. Gronroos (1984) describe service quality in terms of the functionality and technical quality. Functionality here refers to how the system is delivered and technical quality refers to the outcome of the service.

Lai (2004) argued that system quality has positive effect on user satisfaction in the service industry while Ogbuma et al., (2016), argued that the perceived quality of mobile service system has positive effect on user's satisfaction level and the overall confirmation of their use experience.

2.10 Summary

This chapter focused on the review of relevant literature on e-banking and the theoretical model used as the background for this study, that is, the expectation confirmation model. Expected Service quality, perceived security and perceived privacy are the independent variables used to test confirmation, and satisfaction level will determine the user's intention to continuance usage of e-banking. The next chapter is on the research framework of the study and the hypothesis of the study.

CHAPTER THREE

RESEARCH FRAMEWORK

3.1 Introduction

Chapter two is on the review of relevant literatures to this study and the identification of the theoretical background of the study. From this, the theoretical framework on which this study lies has been designed.

This chapter hence, provides the research framework for the study, based on the discussions in chapter two and the research hypothesis based on the literature review discussion

3.2 Expectation Confirmation Theory

Expectation confirmation Model (ECM) was developed from Expectation- confirmation theory (ECT) which was first developed by Oliver (1980). From the expectation – confirmation theory (ECT), Bhattacherjee, (2001) built the Expectation – confirmation model (ECM) as a way to understand user's intention towards Information System (IS) continuance usage. Expectation here refers to the basic level where confirmation acts as evaluation towards customer's satisfaction. The researcher compared the IS users' continuance decision to that of consumers' repurchase decision because both follow the same sequential order of " (1) making initial acceptance or purchase decision, (2) experiencing initial use of the product or service, (3) making ex-post decision of continue use or reversal of the initial decision".

Expectation – confirmation model (ECM) is a three – dimension concept of perceived usefulness, confirmation of expectation and satisfaction. Hayashi et al., (2004) described the basic differences between the two, that is, Expectation – confirmation theory (ECT) and Expectation- confirmation model (ECM). The researchers described ECT as being focused on pre and post consumption factors while ECM focuses on the related construct of post-acceptance, that is, an individual has intention to use a service or product continually, after developing expectations about the product or service. Bhttacherjee (2001) study on IS continuance found that the continuance intention os determined by users satisfaction with the IS use and perceived usefulness of continued IS use.

Limayem et al. (2007) explored other variables which includes habit, comprehensiveness and frequency of past behavior to explain the expectation confirmation model of S usage. The study defines habit as "the extent to which people tend to perform behaviours (use IS) automatically because of learning" and the result shows that IS continuance usage is not only because of user's intention, but also, because of habit. From the study, frequency of past behavior of IS usage, satisfaction and comprehensiveness of IS usage are main factors that make users form habit and it therefore, influences the continuance behavior.
ECM model has been accepted in describing user satisfaction and users continuance intention to use (Ogbuma, 2016; Venkatesh et al., 2011; Bhattacherjee, 2001). This is shown in figure 3.1

Expectation confirmation Theory therefore follows sequential stages of customers arriving

at a point of intention to continue the usage of products and services. The first stage is the stage prior to purchase where customer have an expectation from the product or service. After the initial consumption of the product or service, they form perception as regards the performance of the product or service, if it confirm their initial expectation (Halilovic & Cicic, 2013). The level at which the performance of the product or service confirm their initial expectation will determine their level of satisfaction. Satisfied customers will therefore decide to form a continual usage intention while dissatisfied customer will

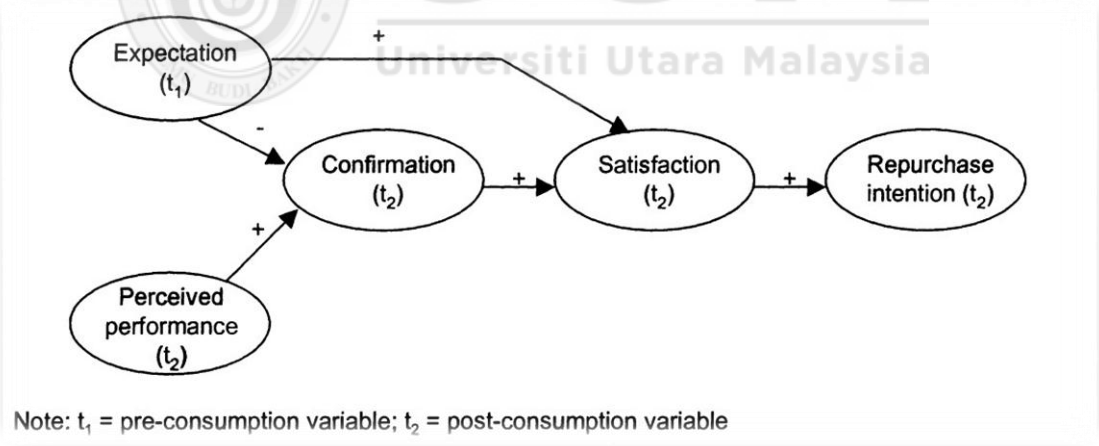

FIGURE 3.1
Expectation Confirmation Model
Source: Bhattacherjee, 2001

discontinue its usage.

Previous research on ECM are reviewed in order to develop greater understanding of the ECM model. These researchers used the ECM model in the areas of information technology, e-commerce, e-learning, m-service, web service. (Bhattacherjee, & Premkumar, 2004; Ogbuma, 2016; Hong et al., 2006; Hayashi, et al., 2004). In this study, ECM is applied to the context of e-banking. Hsu et al. (2004), Susarla et al. 2003, in their research showed that satisfaction of customer predicts their continuance usage intention.

3.3 Research Framework

Figure 3.2 is a diagram showing the framework of this study, it explains the relationship between the independent variables and the dependent variable.

The study examines the continual usage intention of e-banking, based on the expectation-confirmation model. The expectation is in terms of the expected service quality, perceived security and perceived privacy.

The research framework for this study is adapted from the expectation confirmation model (ECM). The model for this study is shown below in figure 3.2

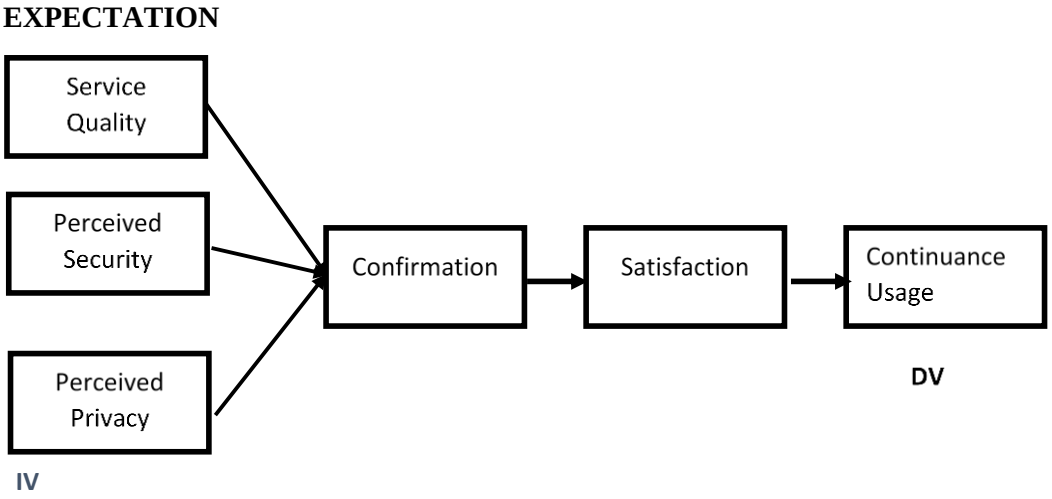

FIGURE 3.2

RESEARCH FRAMEWORK OF THE STUDY

3.4 Research Hypothesis

Based on the review of the relevant literatures in the previous chapter (Olasina, 2015: Peter, 2015; Altun, 2012; Kasheir et al., 2009; Mavetera, 2007; Cheung, 2001) hypotheses are hereby developed for this study. This study examines the relationship between expected service quality, perceived security and perceived privacy in user's e-banking confirmation using ECM model.

Service Quality and Confirmation

E-banking Service quality refers to the standard, worth and level of what is provided by the bank management on its e-banking platform. Service quality is a factor that determines the satisfaction of customers, if the expectation is confirmed, it affects the reliability of the e-banking platform. This include the documentation quality, the programming quality of the system, the ease of use by customers, consistency in the user interface (McKinney et al., (2002); Delone & Mclean, 1992; Rai et al (2002) discovers

that if information quality which is part of the service quality is of the organization is confirmed, it affects satisfaction.

Using the IS service model, Pitt et al. (1995) also confirmed the impact of service quality as a major factor that determines the success of any organization. Kettinger and Lee (1994) finds that service quality is part of the most significant factors that determines user's satisfaction.

Roca (2006) examined the impact of service quality on confirmation of the use of Information system using Expectation Disconfirmation Model (EDT) and explained that the performance of the product and service before and after consumption will influence the disconfirmation. Hence, if the performance is higher than expectation, it creates positive confirmation. This was also confirmed by Spreng and Chiou, (2002).

This study therefore examines this in the context of e-banking. To examine if the expectations of users regarding the service quality of e-banking is confirmed after the initial usage.

H1 - Users extent of confirmation is associated with service quality of e-banking

Perceived security and Confirmation

Perceived security is the security of e-banking expected by the users prior to the use of e-banking services. Bhartacherjee (2001) Cheng et al, (2006) affirmed that security is a strong factor that influences the use, acceptance and continuance usage of technology if the expectation is confirmed. This does not agree with Susanto et al. (2015) on the study

of continuance usage of smartphone, concluded that the user's expectation regarding security was not confirmed and so also is the impact on satisfaction was not significant.

Regarding the confirmation of user's expectation in terms of security, it is discovered that security is one of the main factors that limit the use of e-banking services by bank customers (Odumeru 2007). Pikkareinen et al. (2004) study on the factors that affects the use of online banking discovered perceived security plays a huge role in limiting customers from using e-banking. Eurostat's (2010) on their research discovers that more than 30% of the respondents are not willing to embrace the electronic services because of privacy issues.

Cheung et al. (2002) also confirmed in the study on the acceptance of online banking in New Zealand which is also confirmed on the study on e-banking in Nigeria that the fear of deception, cyber attackers, fake banking sites are some of the security issues that inhibits the use of e-banking by bank customers. Since confirmation of perceived privacy is an individual's users perception, and it is one of the main factors that influences decision to continuance usage, (Cheng 2014; Lin et al, 2006), this study thereby examine the perception of Nigerians as regards e-banking security, to examine if the expectations of the users are confirmed. This influence the hypothesis:

H2: Users extent of confirmation is associated with their perceived security expectation of e-banking

Perceived Privacy and Confirmation

Privacy is a strong factor that influences the acceptance and continual usage of any technology as posit by Susanto et al (2015), Shih and Fang, (2006). Bhattacherjee and

Barfar (2011) argues that the perceived privacy influences confirmation which also influences the intention of continuance usage. Susanto (2015) findings showed a counter view that perceived privacy influences trust but not confirmation which leads to satisfaction; this shows that the expectation regarding privacy was not confirmed. This leads to the third hypothesis of this study, to examine if perceived privacy influences confirmation or not.

H3: Users' extent of confirmation is positively associated with their perceived privacy expectation of e-banking services.

Confirmation and Satisfaction

Confirmation of users expectation of product or service is an antecedent to customers satisafaction, this means, user satisfaction is influenced by the confirmation of the expectation by their past use of information system (Alanazi, 2013; Bhattacherjee, 2001). There is therefore, a causal relationship between confirmation and satisfaction (Roca, 2006) Confirmation hence, have a cause and effect link with satisfaction as it directly affects satisfaction (Lin et al., 2005; Hayashi et al., 2004).

The relationship between satisfaction levels of user's usage will be tested on the continuance intention of e-banking usage. For this study, it is hypothesized that:

H4: Users satisfaction is associated with their extent of confirmation of e-banking expectations.

Satisfaction and Continuance usage intention

Satisfaction of user is seen as crucial for continuance usage intention. Oliver (1981) defined satisfaction as "the summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the consumer's prior feelings about the consumption experience". This support the Bhattacherjee's (2001) analysis of satisfaction as the "psychological or affective state related to and resulting from a cognitive judgment of the expectation performance discrepancy (confirmation)"

Limayem et al. (2007) study on marketing shows that the long term loyalty of customer is based on their satisfaction of the products, therefore, satisfaction, to the study, is a key antecedent to continuance usage intention.

Other studies have examined the impact of satisfaction on the user's decision to continue or discontinue a product of service. It is hence, an importance factor that determines the ability of the management to retain their customer base, as it affects the users directly (Igbaria & Tan, 1997; Seddon, 1997; Jurison, 1996).

The influence of satisfaction on customer's continuance usage intention on the information technology was confirmed by Devaraj et al. (2002). This is also confirmed by Ribbink et al., (2004) in the context of online company. Roca (2006) discovered that satisfaction has impact on continuance usage intention of in the context of e-learning. Lankton and Mcknight (2006) in their research confirmed that satisfaction and trust has an effect on the intention of continuance usage in the use of technology. Hence for this

study, it is predicted that the more the satisfaction of e-banking users, the greater the intention to continue its usage in the foreseeable future.

H5: User's e-banking continuance usage intention is associated with their satisfaction of e-banking usage.

3.4 Summary

This chapter shows the framework for the study, based on the expectation confirmation model and five hypothesis were hence, developed from the review of the relevant literatures. The next chapter is the research methodology used for this study. This include the research design, population and sampling procedure, research instrument/questionnaire, sampling frame, research variables, and finally, introduces the statistical tools that is used for the study.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 Introduction

The methodologies and strategies used in presenting this research are discussed is this chapter. These include the research design, population and sampling procedure, research instrument/questionnaire, sampling frame, research variables, and finally, the chapter introduces the statistical tools that were used in the next chapter to interpret the data gathered.

4.2 Research methodology

Below in table 4.1 is the Research Onion. A diagram showing the generic research methodology framework. This shows the different approaches to research that can be adopted and used by researchers in carrying out studies on their research interest.

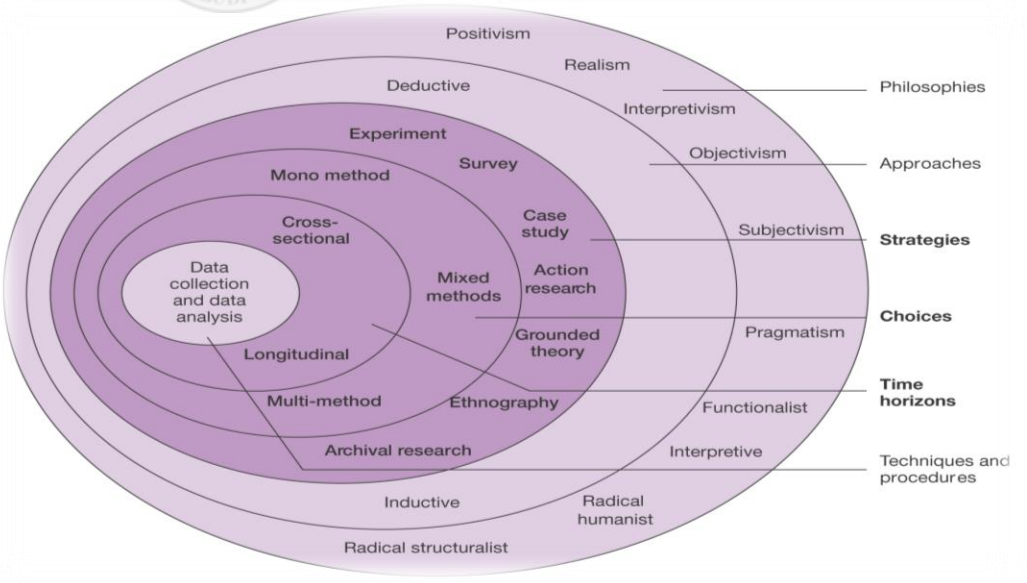

FIGURE 4.1 ***THE RESEARCH ONION***

Source: Lewis and Thornhill, 2009, p 138; Effiong, 2012, p 126

Sekaran and Bougie, (2010) and O'Leary, (2005) explained that the main purpose of every research conducted is to solve problems after thorough study and analysis of the situational factors is carried out. This is the purpose of this research, to find the determinants of e-banking continual usage among Nigerians.

Users of home banking are generally younger people, (Courtier & Gilpatrick (1999), Hall et al. (1990) confirmed this that the average users of online financial services are individuals of average 39 years old, from his comment, he elucidated that 77 percent of the online financial service users are college educated. This is what guided us in this research to conduct the study on electronic banking focused on students.

Therefore, this research is specific towards the views of the Nigerian students in the Universiti Utara Malaysia. The participation of all Nigerian students in UUM is not compulsory. Therefore close ended questions were used to collect data on their perception as regards factors that determines continual usage of e-banking. These are the factors that determines the continual intention of Nigerians to use Nigeria e-banking.

The factors under consideration includes the expected service quality from the electronic banking system, the perceived security of the e-banking and the perceived privacy associated with the use of electronic banking. These expectations from e-banking system will be confirmed by the users, and their views after its use will be confirmed if it was able to meet up with their initial expectation before its use. The confirmation will

therefore, determine their level of satisfaction. The level of satisfaction propels users decides the continual usage or opt for other alternatives.

4.3 Research Design

Research Design is the specific methods and procedures, applied, to answer a research question (Privitera, 2013). A research design is also referred to as the blueprint, the detailed plan, the structure and strategy of how a research study is to be completed so as to obtain answers to the research questions or problems (Kumar, 2011). Privitera, (2013), summarized research design into three categories: (1) Non-experimental research design, (2) Experimental research design, (3) Quasi - experimental research design. The non - experimental research design is adopted for this research. Non-experimental research design is further classified into Quantitative and qualitative. This study adopts the quantitative research design.

4.4 The Sampling Process

Sampling is the procedure of choosing a portion of the population that are sufficient and satisfactory, this provides researchers of the study with the sample and understanding of the properties and the components of the sample subject. Also, the sampling method allows the researcher to get the data on the variables that need to be tested and allows and enables the collection of information from each member of the specified population. Therefore, the possibility of generalizing of the properties and components of the population elements is increased (Sekaran, 2000). However, in the sampling process, the elements that the researcher should consider in this respect include: “(1) defining the

population, (2) collecting the data from the designated elements, (3) choosing an appropriate sampling frame or technique, (4) determining the sample size, (5) selecting the sample elements, and (6) selecting an appropriate sampling procedure" (Churchill, 1999).

4.4.1 Population

A population is defined as "all members of any well-defined class of people, events or objectives" (Ary, Jacobs & Razavich, 2002). Population also refers to "the entire group of people, events or things of interest that the researcher wishes to investigate" (Sekaran, 2000). It is the total collection of the subject matter to be studied in the research (Cavana et al., 2001) Therefore, the population is the complete units from which a sample is to be drawn, as "it consists of all units such as individual, households, or organizations to which one desires to generalize survey results" (Dillman et al., 2007).

This study focus on the continuance usage of e-banking in Nigeria. The population of this survey comprises the Nigerian students in the Universiti Utara Malaysia (UUM). The total number of Nigerian students in UUM as at November 2017 is around 300 students. Therefore the total population for the study is 300.

4.4.2 Sampling

Sampling is referred to as the process of selecting samples. It is the process of examining a limited number of cases from all the available cases in a population (Saunders, Lewis and Thornhill, 2007, p. 204).

Previous researches have shown that sampling techniques available to any researcher can be grouped into two: (1) probability sampling - simple random sampling, systematic sampling, stratified sampling, cluster sampling, proportional versus disproportional sampling, multistage area sampling; and (2) non-probabilistic sampling - convenience sampling, quota sampling, and snowball sampling (Creswell, 2010; Hair et *al.,* 2010; Sekaran & Bougie, 2010; Denscombe, 20 10; Sanders, Lewis & Thornhill, 2009; Zikmund, 2003).

This study has selected the population samples of this study using probability sampling and it has selected simple random sampling method. Using this sampling methed, every individual in the population has the same chance of being selected. As it enables respondents, Nigerian students in the Universiti Utara Malaysia to give their views in order for the research questions to be answered and for the achievement of the research objectives (Udofia, 2011; Sekaran, 2003).

The use of simple random sampling in this research is to prevent bias by the researcher (Salkind, 2003) and to ensure true representation and generalization of the result (Cavana et al., 2001).Thus, this study has selected the population samples of this study using probability sampling with an emphasis on simple random sampling method as it enables respondents (Nigerian Students in the Universiti Utara Malaysia, in the population to have the same chance of being selected as the sample objects (Sekaran, 2003).

4.4.3 Sample Size

According to Malhotra (2002) the ways to determine the number of pointers when considering a study sample size were first to decide on the nature of the research, secondly on the importance of the decision, thirdly on the number of variables, fourth on the nature of the analysis, fifth on the size of the sample, sixth on incidence rates and next on completion rates and finally on resource constraints.

Chin and Newsted (1999) explained that if small sample sizes (N=20) were used in large complex models, it would not isolate low valued structural path coefficients **(P** = 0.20) until large sample sizes (N = 50) are employed. Type I error is the probability of accepting a wrong result instead of rejecting it (Sekeran, 2003) and type II error is the error due to a larger sample size which may lead to accepting a particular result instead of rejecting it (Sekeran, 2003).

4.4.4 Sample size determination

The objective of conducting quantitative research is to collect data that represents the entire population to be studied (Sekeran &Bougie, 2010; Krejcie & Morgan, 1970). This is the reason for the emphasis on sample size determination (Tiecehurst & Veal, 1999). During the process of sample size determination, there are two major flaws that should be watched out for as explained by some researchers (Abdullateef, 2011; Bartlett et al., 2001). These flaws are the researchers disregard for: (1) problems arising from sampling error when determining the sample size and (2) problems arising from response and non-response bias.

Therefore, in order to obtain the required sample size from the population of 300 Nigerian students in Universiti Utara Malaysia, the study adopt the formula given by Tabachnick and Fidell (2007), taking into account the number of independent variables in the study.

The formula is:

$n = N > 50 + 8m$

Where,

n = sample number

N = population

m = number of independent variables.

$50 + 8(5) = 90$

Hence, the expected sample size for this research is 90, but the study used 105.

4.4.5 Unit of Analysis

Unit of Analysis is described as the level of aggregation of the data collected (Sekaran & Bougie, 2010). It is what information is collected from and from which, conclusion is formed (De Vaus, 2011). This can be from individual, organizations, countries or any other bodies. For the purpose of this research, the emphasis of the study is on continuance usage intention of e-banking; therefore, the unit of analysis is individual.

4.4.6 Estimated response rate

For the purpose of this study, the total number of questionnaire that was distributed is 105. The additional is to cater for the loss due to damages and respondents that couldn't return the questionnaires (Salkind, 1997). It is also to ensure the non – response bias, that is, non-response by some respondents will not affect the result from the survey. The questionnaires were fully distributed in Universiti Utara Malaysia premises.

4.5 Research Activities

For the purpose of this study, the research activities comprise: (1) the research instrument design (2) primary data collection (3) Data Analysis.

4.5.1 Research Instrument design

4.5.1.1 Measurement of Construct

A structured questionnaire is designed to measure the variables under study. All the question

naire items were self-assessments and respondents are required to determine the degree to which the items on a Likert scale are 1= 'strongly disagree' and 5 = 'strongly agree' to state their opinions on the determinants of continuance usage of e-banking in Nigeria.

This present study utilized a structured questionnaire due to its various advantages. First, efficiency of timing. Second, the questions were standardized with a common and transparent meaning. Finally, it represented an ideal for statistical descriptions and ideal

for asking factual matters (Bechhofer & Paterson, 2000). The structured questionnaire provided alternative answers to each question and the respondents simply need to choose the applicable answer.

Theoretical constructs used in this study were measured and operationalized using validated items adapted from previous researchers. The measurement of continuance intention was adapted from Susanto et al., (2016); Suh & Han (2002) and Bhattacherjee (2001). Measurement of satisfaction were adapted from Susanto et al. (2016); Bhattacherjee and Premkumar (2004). Measurement of confirmation were adapted from Susanto et al. (2016); Kim et al. (2009) and Bhattacherjee (2001). The measurement of perceived privacy were from Eid, (2011); Kelly and Erickson (2005) Galanxhi-Janaqi and Nah (2004) Park and Kim (2003); and Godwin (1991) the measurement of perceived security were from Eid (2011); DongHer (2004); Kolsaker and Payne (2002) and Jones (2000) and the measurement of expected service quality was adapted from Eid (2011); Park and Kim (2003) and McLean (2003)

Continuance usage intention: this is the intention formed by the users of e-banking to continue using it or discontinue its use. This is directly related to the satisfaction level. Four items were used in this construct and were adopted from previous researchers Susanto et al., (2016); Suh & Han (2002) and Bhattacherjee (2001). The respondents were asked their intention to continue using e-banking, their intention not to discontinue the usage of e-banking, and their intention to continue using e-banking rather than other alternatives and their frequency in the future usage of e-banking. Likert scale with

response options ranging from 1 (strongly disagree) to 7 (strongly agree) were used in assessing their response.

Satisfaction: satisfaction refers to the internal benefit derived from using e-banking. Four items were used in this construct and were adapted from previous researchers like Susanto et al. (2016); Bhattacherjee and Premkumar (2004) the respondents were assessed on satisfaction based on their choice, their experience, their decision and their overall satisfaction with e-banking. Likert scale with response options ranging from 1 (strongly disagree) to 7 (strongly agree) were used in assessing their response.

Confirmation: this refers to the degree to which the respondents confirms his expectation after the usage of e-banking. Four items adapted from previous researcher which include Susanto et al. (2016); Kim et al. (2009) and Bhattacherjee (2001) were used as measurement for the construct as regards the users experience with using e-banking, if it was better than what they expected, the service level provided by e-banking, the security level of e-banking, the expectation regarding privacy and the overall expectation confirmation. Likert type scale with options from 1(strongly disagree) to 5 (strongly agree) were used.

Perceived privacy: this is the degree to which the respondents expect privacy on e-banking. Four items were adapted from previous researchers which include Eid, (2011); Kelly and Erickson (2005) Galanxhi-Janaqi and Nah (2004) Park and Kim (2003); and

Godwin (1991). Likert type scale ranging from 1 (strongly disagree) to 5 (strongly agree) were used for this construct.

Perceived security: this is the user's expectation of e-banking security prior to its usage. Three items were used to measure this construct and they were adapted from previous researchers which are Eid (2011); DongHer (2004); Kolsaker and Payne (2002) and Jones (2000). The three items cover the area of safe transmission of user's information, sufficient data capacity to ensuring data security and the financial transactions risks. Likert type scale ranging from 1 (strongly disagree) to 5 (strongly agree) were used for this construct.

Service quality: This refers to the user's perception as regard their expectation on e-banking service quality, prior to the use of the e-banking services. Three items were used to measure this construct and they include the information on the e-banking platform expected to facilitate easy transactions, provision of relevant services information and easy transactions. These items were adapted from previous researchers which include Eid (2011); Park and Kim (2003) and McLean (2003) Likert type scale ranging from 1 (strongly disagree) to 5 (strongly agree) were used for this construct.

Table 4.1 shows the constructs used for the measurement of the variables used in this study.

Table 4.1

Variable	Item original construct	Item modified	Source
Service Quality	1. The information on the Web site facilitates buying the products or services that it sells or markets.	The information on the e-banking site facilitate easy transactions.	[Eid, 2011; Park and Kim 2003; DeLone and McLean 2003]
	2. The Web site provides the relevant the products/services information.	The e-banking site provides the necessary relevant services information.	
	3. It is easy to complete the transaction on the Web site.	Transaction using e-banking be easy to complete.	
Perceived security	1. The Web site has mechanism to ensure the safe transmission of its users' information.	The e-banking platform should ensure safe transmission of its users' information. .	[Eid, 2011; Kolsaker and Payne 2002; DongHer 2004; Jones 2000]
	2. The Web site has sufficient technical capacity to ensure that the data I send cannot be modified by hackers.	The e-banking site should have sufficient technical capacity to ensure security of data	
	3. Purchasing on the Web site will not cause financial risk.	Online financial transactions should not cause financial risk.	
Perceived Privacy	1. The Web site abides by personal data protection laws.	The e-banking site is expected to abide by personal data protection laws to ensure privacy of data.	[Eid, 2011; Goodwin 1991; Park and Kim 2003; Galanxhi-Janaqi and FuiHoon Nah 2004; Kelly and Erickson 2005]
	2. The Web site only collects user's personal data that are necessary for its activity.	The e-banking site should only collect user's personal data that are necessary for its activity.	
	3. The Web site does not provide my personal information to others without your consent.	The e-banking site should not provide users personal information to others without their consent.	
	4. I feel a safe when sending my personal information to the Web site.	Users should feel safe when sending personal information on e-banking sites.	
Satisfacti on	1. My choice to use smartphone banking was a wise one	My choice to use e-banking was a wise one	Susanto,Younghoon Chang, & Ha, (2016) Bhattacherjee (2001b) and Bhattacherjee and Premkumar (2004
	2. My experience with using smartphone banking was satisfactory	my experience with using e-banking was satisfactory	
	3. I think I did the right thing by deciding to use smartphone banking	I think I did the right thing by deciding to use e-banking	

The questionnaire consists of three parts. Part I is an exclusion criteria question, it seeks to understand if the respondent has used e-banking services before and the degree of its usage. Part II seeks to understand the user's expectation and perception of e-banking services in terms of the service quality, perceived security, perceived privacy, confirmation, satisfaction and the continued intention to use e-banking. Finally, part III gathers demographic information

4.5.1.2 Construct operationalization: Rating Scales for the Response

For the purpose of this study, rating scales in employed measuring the constructs as proposed for research in the social sciences (Churchill & Peter, 1984). This study employed Likert scale type of response format (Likert, 1932). The scales referred to as measurement instruments are the collections of items collective into a composite score, and intended to reveal levels of theoretical variables not readily observable by direct means. The Likert scale is one of the most useful types of rating scales. The Likert scale is generally used in instruments measuring options, beliefs and attitudes with an odd or an even number of response options accompanying each statement. The response options should be worded so as to have roughly equal intervals with respect to agreements (DeVellis, 2003).

A five- point Likert scale was chosen as a response format for this study. The Likert scale is chosen because it is more reliable than other methods, it can be used in different cases of research, the agreement – disagreement subject represented were more comfortable for the respondents, each item is of equal value and questions are easy to read and complete (Frazer & Lawley, 2000). The disadvantage of this Likert method which is adopted for

this study is that, there is lack of reproducibility (Oppenheim, 1992) there is the possibility of having lower mean score and the respondent's may have challenge in counting numerals for scoring (Loken et al., (1987).

4.5.2 Data Collection Method

Cross sectional design is used for this study. In cross sectional design, data are collected at a time for a particular research, in order to meet the research objectives (Cavana et al., 2001). There is also time factor as cross sectional design is faster and allows the researcher to avoid time consumption (Sekaran & Bougie, 2010).

4.5.2.1 Data Collection Technique

The research data were collected using survey method. The study adopted questionnaire as an instrument of data gathering and to answer the objectives of this study Questionnaires are essential to and most directly associated with survey research (Babbie, 2004). For the purpose of current study, the researcher employed measurement for the research constructs which had also been validated and found to be reliable and valid, and were subsequently used in several other studies.

The questionnaires were administered using self-administer survey. Questionnaires were distributed to students in lecture halls, halls of residents, school mall, library and other places within the school premises. Self-administered questionnaires could easily be distributed to a large number of respondents at minimal cost (Zikmund, 2003).

Another advantage of this method is the assurance of confidentiality and anonymity (Davis, 2000).Since the researcher is also a student of University Utara, Malaysia, it is easier to administer questionnaires to fellow students. The questionnaire and cover letter explaining the purpose of the study is targeted only to Nigerians, information about confidentiality and anonymity were stated.

4.5.3 Data Analysis

Analysis of data refers to the techniques and the procedures that help researchers in explaining the information in categorized pattern, assist in developing explanations for the result and help in testing the developed hypotheses of the study. In order to test the hypotheses, the correlation and regression analyses was used to explore the relationship between variables (independent variables and dependent variables). IBM SPSS (The Statistical Package for Social Science) Statistics 24 software package was used in data analysis. From the SPSS package, the main constructs for the study were analyzed as well as the demographic items.

4.5.3.1 Descriptive statistics

Descriptive analysis is used to perform the frequency analysis. Descriptive analysis includes mean, range of the scores, standard deviation, kurtosis and skewness (Pallant, 2001). Frequency analysis was used for the demographic analysis, which includes gender, age, marital status, academic qualification, bank and race. Therefore, the descriptive analysis used in the study helps in describing the important characteristics of the data that were collected in order for easy summarization of the samples and measures constructs.

4.5.3.2 Inferential Statistics

Inferential statistics are the procedure and techniques that enable the researcher to draw inferences and conclusion from the collected data in order to generalize the result to the whole population of the study. This helps in making conclusions about the study, to explain the reasons for any differences in the study. Pearson correlation and multiple regressions are commonly used in inferential analysis for data analysis.

4.5.3.3 Pearson Correlation co-efficient

Pearson correlation coefficient is used in examining the mutual linear relationship among variables. The value of correlation coefficient varies between positive +1 to negative -1. +1 reflects that the linear relationship is positivity perfect while -1 reflects there is perfect negative linear relationships among variables, a value of Zero 0 represents no relationships between the variables. (Salking, 2009).in graphical representation, if the plotted points of the variables are very close to one another, it means there is strong correlation among them, but if they are dispersed or far from one another, it means there is weak correlation. The strength of correlation table according to hair et al, (2008) is shown in table 4.2

Table 4.2

Coefficient Scale	Relationship Strength
0.91 – 1.00	Very strong
0.71 – 0.90	Strong
0.41 – 0.70	Moderate
0.21 – 0.40	Weak
0.01 – 0.20	Very Weak

Source: Hair, Money, Samuel and Page (2008)

4.5.3.4 Multiple Regression Analysis

Multiple regression analysis is a method of analyzing the links between the dependent variables and the independent variables.it facilitates the progress of the correlation between the variables. This study uses the regression analysis in ascertaining the relationship between the dependent and the independent variables.

4.5.3.5 Measuring Scale of the Research Variables

This study involves two types of variables; independent and dependent variables. The independent variables include the expected service quality, perceived benefits, perceived privacy, confirmation and satisfaction and the second variable is the dependent variable which is continuance usage intention. The research question for each variable was answered based on the constructs.

The measuring scale as described by Hair et al., (2014) is "a tool with a predetermined number of close ended responses that can be used to obtain an answer to the question". It is "a tool used to distinguish individuals in relation to differences of perception by using some selected variables" Cavana et al., 2001). For social sciences research, there are four categories of measurement scales, they are: "nominal, ordinal, interval and ratio" (Sekaran & Bougie, 2013; Hair et al., 2010, Zikmund, 2003).

Nominal scale is the simplest level of scales because they are most restrictive in terms of the type of analysis that can be carried (Hair et al., 2014). It assigns numbers that can be used to classify items. Ordinal scale is "an ordinal scale arranges objects or alternatives according to their magnitude in an ordered relationship" (Zikmund, 2003). Interval scales has information on the rank at which something is measured (Hair et al., 2014) and ratio scale measures the magnitude of the differences in values as well as the extent of the differences (Zikmund, 2003).

4.5.3.6 Goodness of Measure

Reliability and validity are the two criteria used in determining the goodness of the measure of the constructs. Reliability means many things to many people.it means the measurement items really measured what it was intended to measure. "A measurement is reliable to the degree that it supplies consistent results. Reliability is a necessary contributor to validity, but is not a sufficient condition for validity" (Cooper & Schimdler, 2003). Litwin (1995) defined reliability as the extent to which indicators of a

particular construct converge together and possess the capability of independent measurement of the same construct, and at the same time, are correlated with each other.

This study employed the Cronbach's alpha coefficient (Sekaran & Bougie, 2010) as its internal reliability measures. A reliability test was conducted on the scales used to measure service quality expectation, perceived security, perceived privacy, confirmation, and satisfaction and continuance usage intention.

An unreliable measure can never be valid. Validity is therefore, defined by Robson (2002) as, "The degree to which what is observed or measured is the same as what was purported to be observed or measured".

4.6 Ethical Considerations

This study complies with the University Utara Malaysia Thesis guideline research ethics (2014, p.7) and the code of conduct for members and ethics for researcher (Sekaran & Bougie, 2010). Ethics as defined by the Chambers Dictionary is concerned with human character, system of morals, rules of behavior and treatise of morals. This study considers anonymity, fairness, voluntary consent fairness and confidentiality in data collection and analysis.

4.7 Summary

This chapter provides the methodology used in data collection and analysis. The research methodology includes the research design, population and sampling processes, research instrument used, which is questionnaire, the sampling size, sampling frame, research variables, measurement and the statistical analysis that will be undertaken to analyze the dataset. The survey is self - administered. Self -administered survey is conducted by administering the questionnaire to the respondents face to face. Therefore, this approach leads to easier and faster. Another advantage of this method is the confidentiality which could be sustained. The next chapter focuses on the data analysis and presentation of research findings. It also shows the results of descriptive statistics, validity and data reliability, factor analysis, correlation, and regression analysis.

CHAPTER FIVE

DATA ANALYSIS

5.1 Introduction

This chapter discuss the result of the survey, based on the data collected from 101 Nigerian students in the Universiti Utara Malaysia. The data used for the analysis is the statistical Package for Social Sciences (IBM SPSS statistics 24). The explanation for the findings from the statistical analysis and the result for the research hypothesis is contained in this chapter also.

5.2 Response Rate

The study was administered to Nigerian students in Universiti Utara Malaysia. A total number of 105 questionnaires were distributed. To achieve high response rate, the researcher collected the questionnaire the same day it was distributed, in order to reduce bias and for faster response. Phone calls were put across to students by the researcher for reminder.

A total number of 101 questionnaires were returned to the researcher out of the 105 administered questionnaires, which gave an effective response rate of 96%. According to Sekaran (2003), a response rate of 30% and above is acceptable for a survey, hence, the 96% response rate is acceptable. From the table below is the response rate analysis.

Table 5.1

Response rate of the Questionnaire	
Questionnaire/Response	Frequency/Rate
Number of distributed questionnaires	105
Returned questionnaires	101
Number of questionnaires not returned	4
Response rate	96%

5.3 Data Screening

After data collection, in order for valid and reliable analysis, data cleaning or screening was conducted. This involves the normality of the data, missing data detection, out of range data and detection of outliers and values that are out of range (Hair et al., 1998; Mayers et al., 2006). This is done in order to examine the response of the respondents, to check if questions were answered properly, to check if data fulfill the statistical assumptions and to transform the data for the statistical analysis.

The reason for conducting data screening or data cleaning is to avoid errors these are type 1 error and type 11 error. Type 1 error is the error that may result into rejection of hypothesis that ought to be accepted and type 11 error is acceptance of null hypothesis that ought to be rejected (Sekaran, 2003).

Out of the 101 returned questionnaire, 8 questionnaires were discovered not to have met the exclusive requirements for the study. The exclusion criteria is to know the respondents that have used e-banking before. The survey question is targeted to users of e-banking. 8 respondents indicated they have not used e-banking before.

Table 5.2 shows the total number of questionnaires used for the Analysis

TABLE 5.2

Total number of questionnaires used for the Analysis

Questionnaire	**Frequency**
Total number of returned questionnaires	101
Total number of questionnaires that doesn't meet the exclusion criteria	8
Total number of questionnaires used for the analysis	93

Regarding missing data, Acuna and Rodrigues (2004) stated the 1% missing data poses no threat to the validity of data, 5% missing data is bearable and can be replaced with the mean of the nearest k-value while a 15% missing data possess much threat to the validity of the data and needs a more sophisticated treatment. For this study, the missing data was less than 1% and was treated with the mean of the nearest k-value.

Errors and out of range were also identified and treated. This is done by backtracking to the original source in the questionnaire, and correct response were retrieved and corrected in the system. This is followed by a descriptive analysis to affirm the adjustment made.

Outliers are data exceeding the data range, this threatens the result of the analysis, and it affects the interpretations and conclusion of the study (Pallant, 2011). For this study, a descriptive test was conducted which reveal there were no outliers in the data.

5.4 Measuring Scale of the Research Variables

This study involves two types of variables; independent and dependent variables. The independent variables include the expected service quality, perceived benefits, perceived privacy, confirmation and satisfaction and the second variable is the dependent variable which is continuance usage intention. The research question for each variable was answered based on the constructs.

The measuring scale as described by Hair et al., (2014) is "a tool with a predetermined number of close ended responses that can be used to obtain an answer to the question'. It is "a tool used to distinguish individuals in relation to differences of perception by using some selected variables" Cavana et al., 2001). For social sciences research, there are four categories of measurement scales, they are: nominal, ordinal, interval and ratio (Sekaran & Bougie, 2013; Hair et al., 2010, Zikmund, 2003).

Nominal scale is the simplest level of scales because they are most restrictive in terms of the type of analysis that can be carried (Hair et al., 2014). It assigns numbers that can be used to classify items. Ordinal scale is "an ordinal scale arranges objects or alternatives according to their magnitude in an ordered relationship (Zikmund, 2003). Interval scales has information on the rank at which something is measured (Hair et al., 2014) and ratio scale measures the magnitude of the differences in values as well as the extent of the differences (Zikmund, 2003).

Table 5.3 present the descriptive analysis on the measurement scale on research variables used in this study.

Table 5.3.
Descriptive Analysis of the Measurement scale on Research Variables

Variables	Types of Scale
Exclusion Criteria	Nominal
Service Quality	Ordinal
Perceived Security	Ordinal
Perceived Privacy	Ordinal
Confirmation	Ordinal
Satisfaction	Ordinal
Continuance Usage Intention	Ordinal
Gender	Nominal
Age	Nominal
Marital Status	Nominal
Academic Qualification	Nominal
Occupation	Nominal
Bank	Nominal
Race	Nominal

5.5 Descriptive Analysis

Descriptive analysis assists in explaining the demographic information of the respondents. For the purpose of the analysis, the demographic characteristics addressed are: Gender, Age, Academic Qualification, Occupation, Bank and Race. Table 5.4 reflects the demographic information of the respondents.

Table 5.4
Demographic Analysis of the Respondents

Demographic profile	Category	Frequency	Percent
Gender	Male	60	64.5
	Female	33	35.5
	Total	93	100.0
Age	Under 20	1	1.1
	20-29	35	37.6
	30-39	37	39.8
	40-49	17	18.3
	50-59	3	3.2
	Total	93	100.0
Occupation	Employed for wages	33	35.5
	Home maker	2	2.2
	Self employed	11	11.8
	A student	44	47.3
	Looking for work	2	2.2
	Military	1	1.1
	Total	93	100.0
Academic qualification	Master degree	58	62.4
	First degree/HND	9	9.7
	PhD	25	26.9
	Other	1	1.1
	Total	93	100.0
Bank	First bank	16	17.2
	Gt bank	35	37.6
	Access bank	8	8.6
	Zenith bank	13	14.0
	Other	21	22.6
	Total	93	100.0
Race	Yoruba	31	33.3
	Hausa	27	29
	Igbo	13	14
	Others	22	23.7
	Total	93	100

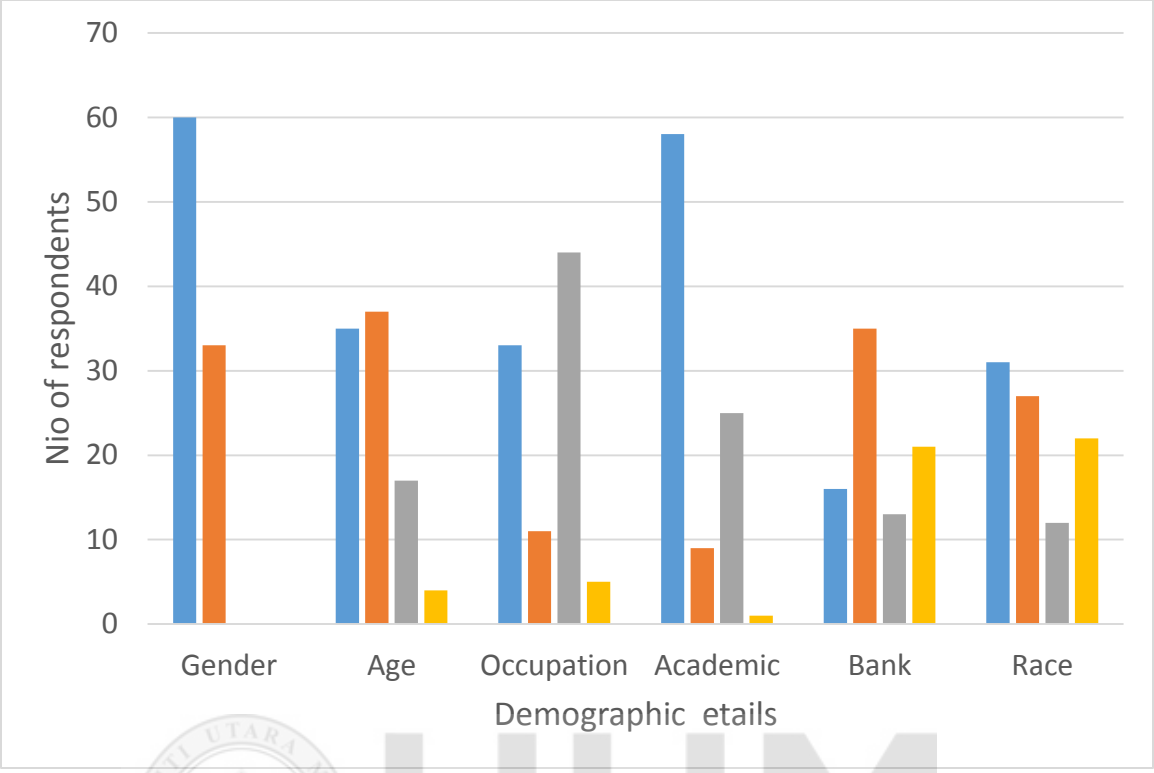

FIGURE 5.1 GRAPHICAL REPRESENTATION OF THE RESPONDENT'S DEMOGRAPHIC DETAILS

The above table 5.4 shows the demographic profile of the respondents that participated in the survey. The respondents were Nigerian students in Universiti Utara Malaysia. It was evident that 64.5 of the respondents are male while 35.5 are female. This is evident because majority of Nigerians in UUM are male.

With respect to the age of the respondents, majority falls within the age bracket of 20 -49 years of age. 20-29 (37.6%), 30-39 (39.8%) and 40-49 (18.3%). This is because majority of Nigerian students in UUM falls within this age group and the majority of electronic bank users are young and middle aged people.

Regarding occupation, majority are within the student groups of 47.3% and employed for wages group are 35.5% of the total respondents because many of the students are full time students who have not started working and the employed group are mostly workers and universities lecturers who came to UUM for their Ph.D.

Regarding academic qualification, those that indicated Master's degree and Ph.D. are 62.4% and 26.9% respectively. This is because, majority of the Nigerian students in UUM are Masters and Ph.D. students.

Regarding bank preference, 37.6% of the respondents prefers GTbank, this is because, after the cash policy that limits withdrawal using Nigerian credit cards outside the border of the country, GTbank is among the few banks that did not fully implement this policy, this assisted students to use the GTBank credit cards at Point of Sales (POS) for payments, therefore, majority of the Nigerians prefer the bank.

Lastly, regarding race, Nigeria is a multi – ethnic country, with three major tribes: Yoruba, Hausa and Igbo. As regards the respondents, 33.3% are Yoruba, 29% Hausa, 14% Igbo and others which accounts for Igala, Ebira, Fulani and other tribes in Nigeria accounts for 23.7% of the respondents.

5.6 Reliability and Validity Analysis

This part explains the reliability and validity test for the whole construct. The reliability of this study was measured using the Cronbach's Alpha. Zikmund (2003) described Cronbach's alpha as a measure of internal consistency of a research instrument. The

reliability test assists researchers in evaluation of data gathered from the total sample (Sekaran, 2003) as it acts as the best representative of the total study population, by measuring the degree to which the results are consistent (Golafshani, 2003).

The reliability test of this study was conducted using the Statistical package for social sciences (IBM SPSS Statistics 24). A high reliability result shows that the instruments has minimal error discrepancy, the reliability analysis for the study is shown in table 5.5.

Table 5.5
Reliability Analysis

Variables	No of Items	Cronbach Alpha
Service Quality	3	0.883
Perceived security	3	0.855
Perceived Privacy	4	0.863
Confirmation	5	0.903
Satisfaction	4	0.905
continuance usage	4	0.913

Source: Researcher

The reliability test from the Cronbach Alpha presented above in Table 5.5 have a minimum of 0.855 which indicates a satisfactory value. Sekaran, (2003) stated that reliability value of more than 0.7 is good and acceptable. This is an indicator that all the variables are considered to be strong, reliable and acceptable for the analysis. It is therefore not necessary to delete any item since all are reliable and can be used in the next phase of the analysis known as the Factor Analysis.

5.7 Factor Analysis

In examining the relationship between the dependent variable and the independent variable, there is need for validity analysis. The analysis shows the validity of the items used for the constructs if they are actually measuring what they are intended to measure. In order to validate the items, factor analysis was conducted. IBM SPSS 24 was used for the factor analysis for this study.

The first test in the factor analysis is the KMO confirmation. KMO (Keiser – Meyers – Oklin) is verified before the factor analysis. This is done before the Anti Image Matrices, by analyzing the anti-image correlation with "a square". Any value below 0.5 should be deleted, after which the cumulative variance is checked in order to determine the dispersion level of the items. The higher the value of cumulative variance, the better the correlation between the items in each variable.

KMO values between 0.5 and 0.7 are considered as average, 0.7 – 0.8 as good, 0.8 – 0.9 as very good and higher than 0.9 as excellent (Hutcheson and Sofroniou, 1999). For this research the KMO value is 0.923. This is shown in table 5.6. This shows that the KMO is excellent, for the study.

Table 5.6
KMO and Bartlett's Test[a]

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.923
Bartlett's Test of Sphericity	Approx. Chi-Square	1906.080
	df	253
	Sig.	.000

a. Based on correlations

The result in Table 5.6 shows the fitness of the data used in the study. The KMO obtained from all variables is 0.923 with a significance of 0.000.

After the KMO, anti-image check was performed, any value less than 0.50 should be deleted, but for this research, all the values are above 0.5.

Hair et al. (2010) explained that for factor analysis to be conducted, there should be at least five respondents in every variable under consideration Pallant (2007) and Hair et al.,(2006) explained that items that loads 0.50 and below should not be retained but only items that load above 0.50 should be retained. The anti – image check already confirmed that all the items loads above 0.5.

Therefore, for factor analysis, all the three items measuring service quality construct loads above 0.5, for perceived security, all the three items measuring the construct loads above 0.5, for perceived privacy, all the four items measuring the constructs load above 0.5, for confirmation, all the five items measuring the construct load above 0.5, for confirmation construct, the four items measuring it loads above 0.5 and the same goes for continuance usage, all the four items measuring the construct load above 0.5.

Table 5.7 shows how well the items measure each of the constructs.

TABLE 5.7

Factor Analysis: How well the items measure the constructs

Items	Service Quality	Perceived security	Perceived Privacy	Confirmation	Satisfaction	continuance usage
SEQ-1	0.673					
SEQ-2	0.611					
SEQ-3	0.584					
PES-1		0.618				
PES-2		0.666				
PES-3		0.691				
PEP-1			0.597			
PEP-2			0.601			
PEP-3			0.624			
PEP-4			0.666			
CON-1				0.624		
CON-2				0.701		
CON-3				0.703		
CON-4				0.698		
CON-5				0.750		
SAT-1					0.639	
SAT-2					0.840	
SAT-3					0.578	
SAT-4					0.718	
CIU-1						0.714
CIU-2						0.780
CIU-3						0.605
CIU-4						0.705
Cronbach's Alpha	0.883	0.855	0.863	0.903	0.905	0.913

Extraction Method: Principal Axis Factoring.

5.8 Hypothesis Testing

The mean score of the variables was first analyzed, The Pearson correlation analysis was then carried out so as to understand the strength of the correlation among the variables. Regression analysis was finally carried out to determine the direct relationship between the dependent and independent variables.

5.8.1 Mean Score of the Variables

The mean score of the variables was calculated using the IBM SPSS 24. The result from the mean score is shown below in table 5.8

Table 5.8

Mean Score of the Variables

Variables	Mean Score	Standard Deviation
Service quality	4.4229	0.75043
Perceived security	4.4659	0.82845
Perceived privacy	4.4812	0.73466
Confirmation	4.0753	0.85308
Satisfaction	4.3091	0.79263
Continuance Usage Intention	4.2204	0.80829

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5.8.2 Pearson Product – Moment Correlation Analysis

To determine the strength of the correlation and the direction of bivariate relationship between each of the independent variables and the dependent variable (Pallant, 2011). The independent variables (service quality, perceived security, and perceived privacy, confirmation and satisfaction) were tested with the dependent variable (continuance usage intention). The result is shown below in Table 5.9. The result shows that the

correlation between the service quality, perceived security perceived privacy, confirmation, satisfaction and continuance usage intention were all strong.

Table 5. 9

Correlation

	Service quality	**security**	**Privacy**	**confirmation**	**satisfaction**	**Continuance usage**
Service quality	1	.779**	.818**	.532**	.587**	.751**
security	.779**	1	.864**	.487**	.554**	.638**
Privacy	.818**	.864**	1	.554**	.601**	.691**
confirmation	.532**	.487**	.554**	1	.729**	.645**
satisfaction	.587**	.554**	.601**	.729**	1	.802**
Continuance usage	.751**	.638**	.691**	.645**	.802**	1

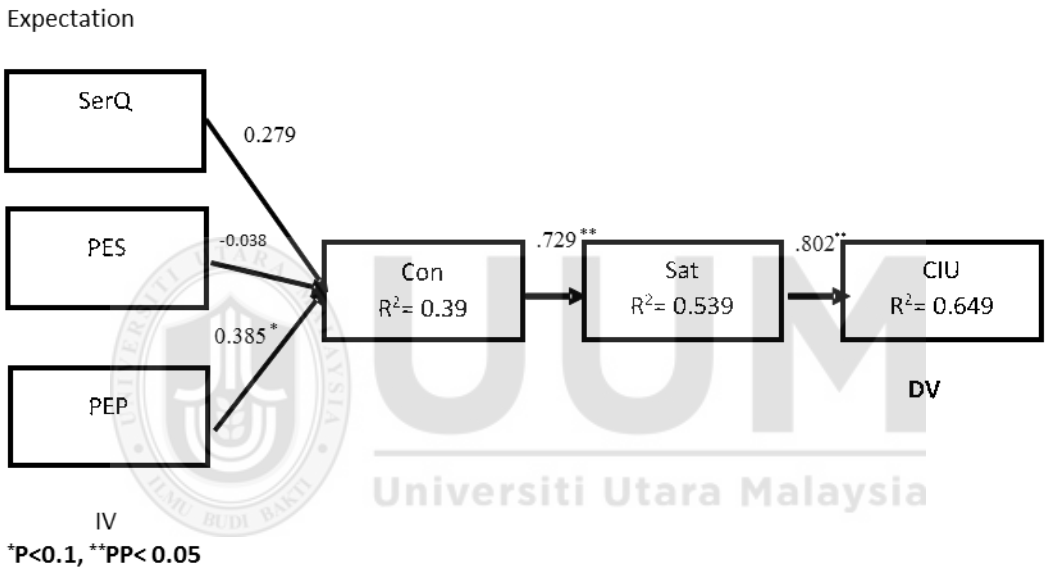
****P< 0.05**

According to hair et al., (2008), if the correlation between variables falls within 0.41 – 0.70, the relationship is moderate and if the correlation falls between 0.71 and 0.90, the relationship is strong. From the figures in table 5.9, it can be seen that the correlation between the variables varies between moderate and strong. Hence, the strength of the relationship between the variables used in this study varies between moderate and strong relationship. There is no weak correlation among the variables.

5.8.3 Regression Analysis

Regression analysis was carried out to determine the variables how much of the variance in dependent variable can be explained by the independent variable, this shows the impact of the independent variable on the dependent variable (Pallant, 2009). The result of the [multiple regressions is shown in figure 5.1. From the result, the expectations of the

three variables (Service quality, Perceived security and Perceived privacy) shows that R^2 is 0.326. Overall, the independent variables are significant with Confirmation. The regression of Confirmation on Satisfaction is significant and the regression of Satisfaction on Continuance usage is also significant. The result is shown in the figure 5.1 is shown below



SerQ – Service quality ; PES – perceived security; PEP – perceived privacy; Con – Confirmation; Sat – Satisfaction and CIU – Continua nce usage.

FIGURE 5.2 RESULT OF THE REGRESSION ANALYSIS

First, the analysis of the impact of the independent variables (Service quality, perceived security and perceived privacy) on the dependent variable (confirmation) was carried out. Figure 5.1 and table 5.10 shows the result of the analysis. It indicates that 39% of the variance of confirmation can be explained by expectations (Service quality, perceived security and perceived privacy). It is further indicated that only the perceived privacy is significant at 0.051 ($^{*}P<0.1$) while the other two variables, service quality and perceived

security are not significant, this is shown in table 5.10. This shows that the expectation of users regarding service quality and security were not confirmed after using e-banking. Therefore, hypothesis 1 and hypothesis 2 are not supported and hypothesis 3 is supported.

Second stage is the analysis of the impact of confirmation on satisfaction level of e-banking users. Figure 5.1 and Table 5.10 show the result of the analysis. The R^2 for satisfaction is 54%. This indicates that 54% of the variance of the satisfaction can be explained by confirmation. The significance of the relationship between confirmation and satisfaction is 0.000 ($^{**}P< 0.05$). This is seen in table 5.10. This indicates that confirmation is positively associated with satisfaction. Therefore, hypothesis 4 is supported.

TABLE 5.10

Regression Analysis Summary

Variables	Beta	Significance
Service Quality	0.279	0.120
Perceived Security	-0.038	0.838
Perceived privacy	0.385	0.051
Confirmation	.729	0.000
Satisfaction	.802	0.000

The third phase is testing the impact of satisfaction on continuance usage intention. The result is shown in figure 5.1 and table 5.10. The R2 for continuance usage intention is 64%. This indicates that 64% of the variance of the continuance usage intention can be explained by satisfaction. The result of the analysis hence, indicates that satisfaction is

positively associated with continuance usage intention with significance at 0.000 (**P< 0.05). Therefore, hypothesis 5 is supported.

5.9 Hypothesis Decision

Table 5.11

Hypothesis Decision

Hypothesis	Statement	Decision
H1	Users extent of confirmation is positively associated with service quality of e-banking	Not Supported
H2	Users extent of confirmation is positively associated with their perceived security expectation of e-banking	Not supported
H3	Users' extent of confirmation is positively associated with their perceived privacy expectation of e-banking services.	Supported
H4	User's satisfaction is positively associated with their extent of confirmation of e-banking expectations.	Supported
H5	User's e-banking continuance usage intention is positively associated with their satisfaction of e-banking usage.	Supported

5.10 Summary

This chapter gave details regarding the data analysis of the questionnaires used for data collection. The process of data collection was described as well as the process involved in data screening and treatment of out of outliers. Description statistics was used in demographic analysis, validity and reliability tests were performed on the data, and factor analysis was used in variables analysis. The mean of the variables was determined,

Pearson correlation test and the regression analysis was performed. This led to hypothesis testing using the result of the correlation and regression analysis.

The discussion of the result is presented in the next chapter, Chapter Five which is followed by the contributions of the study, conclusion, limitation of the study and recommendation for future research.

CHAPTER SIX

DISCUSSION AND RECOMMENDATION

6.1 Introduction

In the previous chapter, the results of this study were presented. This last chapter of this study discusses the results from chapter five. This chapter hence, presents the overview of this study, it discusses the implication of this study, identifies the study limitation and discusses the conclusion of the study.

6.2 Overview of the Study

The concept of e-banking continuance usage is chosen as the focus of this study because the world is evolving with technological advancement and the people; especially those in the developing world must evolve with the technological trends in order to survive at this present times. Technological advancement is therefore, the motivation for this study as the electronic and virtual system is steadily taking over the traditional market, as it offers juicy and attractive benefits to the users in terms of time maximization and cost minimization of transaction, maximization of productivity and saves energy and reduces stress of the bank customers, time is no longer a barrier as transactions is made easy and at minimal cost to anywhere in the world, any time zone, without the bank operation service time barriers off days or holidays, transactions are made twenty four hours in a day and seven days in a week.

Since findings from developed countries cannot be generalized and transferred directly to developing counties, (Clarke, 2001; Dewan & Kreamer, 2000), this research therefore, is

specific on Nigeria as it investigated the factors that can determine customers intention to continue using e-banking services in Nigeria. Nigeria is a developing country, and the rate of technological acceptance is in a developing country compared to the developed ones. Even though there is prospect for technological growth, especially in the baning industry, as the first automated teller machine was installed in Nogeria in the year 1990 (Adewuyi, 2011) the growth can be seen as stunted, this is confirmed by the percentage of the Nigerian population that have access to the iternert. From internet world stats, (2017), it is discovered that 47.7% of Nigerians uses the internet, unlike developed countries where the percentage of people accessing the internet is higher. This means more than half of the Nigerian population have no access to internet as at 2017. It can therefore be inferred that majority of the bank customers have not embraced the use of electronic banking.

Service quality, the e-banking security and privacy concerns are some of the motivation factors that determine the usage of e-banking in Nigeria. The study therefore employed and modified the expectation – confirmation model to express the confirmation of the user's expectation from using e-banking, this is the basis for their satisfaction with the system and it formed their continuance usage intention.

The data were collected from the Nigerian students in University Utara Malaysia. Nigerian students in UUM from the respondents demography shown in the previous chapter reflect that majority of the students are either M.sc or PhD students. This means

they are young, literate, intellectuals and this study reflects their views regarding e-banking.

For successful implementation of the cashless policy in Nigeria, both the intellectuals and the non-intellectuals need to embrace the e-banking system, this include the traders, business men, market women, the technicians as well as the old and young ones. The data collected were analyzed using the IBM SPSS 24.

6.3 Summary of the Results

The aim of the study is to examine the relationship between expectation of e-banking users and the confirmation of their expectation to understand their satisfaction level and generate their intention for continuance usage of e-banking. Overall, the study shows that the expectation in terms of service quality and perceived security were not confirmed, this means the e-banking security and service to users were below their expectation.

The confirmation of the user's expectation regarding privacy was significant. This means the users expect more from the e-banking platform then they are currently experiencing. The correlation between confirmation and satisfaction was positive and the relationship between satisfaction and continuance usage is strong.

Table 6.1

Summary of Result

Overall, the result shows that 36% of confirmation comes from the three variables: service quality, perceived security and perceived privacy.
The result shows there is a no correlation between the user's expectation regarding security and confirmation. This means the expectations of users regarding e-banking were not confirmed at all.
The result shows that the service quality expectation from e-banking was not significant. The bank management should therefore, work more on the e-platform, to make it easier for customers to use, reduce unnecessary stress and make the electronic banking customer friendly
Regarding privacy, there is significance relationship with Confirmation, although, This means that the expectation regarding privacy of data and customer information is confirmed. Therefore, the bank management need to improve the service in terms of privacy, so as to meet the user's expectation in a more effective way.
Confirmation is positively correlated to satisfaction. This shows that confirmation is 53.2% correlated to satisfaction. On this basis the decision on hypothesis H4 was justified.
Satisfaction is positively correlated to continuance usage intention. Satisfaction is a strong predictor of continual usage, this reflect user affect

6.4 Discussion

The discussion is presented on the findings of the hypothesis in relation to the objectives of this study. The specific objectives of this study is:

1. To examine the impact of Service quality, perceived security and perceived privacy on users expectation confirmation
2. To examine the impact of users expectation confirmation on satisfaction of e-banking usage
3. To examine the impact of users satisfaction on their continuance intention of e-banking usage

The Impact of Service Quality, Perceived Security and Perceived Privacy on Users Expectation Confirmation

From the study framework, there is a direct relation between Expectation and Confirmation. Three variables are used as independent variables under Expectation and they are service quality, perceived security and perceived privacy. This was used for objective one and to answer the research question one:

1. To what extent does expectation (expected service quality, perceived security and perceived privacy) able to influence user's confirmation of e-banking usage in Nigeria?

Overall, the result shows that 36% of confirmation comes from the three variables. Overly, this is a weak correlation between the expectation and confirmation According to Hair et al. (2010). This means that only 36% of expectation, e-banking users have for the system is actually confirmed after its usage. The result shows that the service quality

expectation from e-banking was not significant. This means the expectation of the users regarding e-banking was not confirmed.

The bank management should therefore, work more on the e-platform, to make it easier for customers to use, and make the electronic banking customer friendly. This will inadvertently, improve the confirmation of users expectation and the percentage of bank customers using the e-platform will increase, as customer's word of mouth plays a huge role in advertisement of any product or service, so also, for e-banking. If customer's expectation concerning the service quality is confirmed, they will tell others and words of mouth play a huge role in acceptance of a service or product. When there are positive ratings by customers and, positive words are spread about the service quality of e-banking, this will attract more customers and more will adopt the e-banking platform, the intention of continual usage will then be formed.

Regarding security, there is a no correlation between the user's expectation regarding security and confirmation. This means the expectations of users regarding e-banking were not confirmed at all. Users find the e-banking system as not secured and the security was totally below expectation.

In order for the Nigerian government to be able to implement the cash policy known as the cashless economy, the citizens must find the e-banking platform attractive, the bank management should also do their best in allaying the user's fears about security, by

ensuring the customers transactions are secured and the fear of transaction risk when using the e-banking will be reduced significantly, as most customers are risk averse.

Regarding privacy, there is significance relationship with Confirmation. This means that the expectation regarding privacy of data and customer information is confirmed but the bank management need to improve the service in terms of privacy, so as to meet the user's expectation in a more effective way.

From personal interaction with the respondents after the study, it is discovered that privacy is confirmed because most of the customers do not feel that the banking system need their personal data or information regarding their personal information. This is because, high expectation was not formed by the customers regarding e-banking privacy, and therefore, the confirmation was significant.

Bank customers are therefore, more concerned about their money than their personal information like demography details. They are more concerned about the security of their transactions than their personal data. They are more concerned about the riskiness of transactions and, the security of paying online, shopping online, security of their credit and debit card is more important to them. This is the reason, a high expectation was formed regarding the perceived security, and the bank, were not able to fulfill their expectations because, it is too high.

Some banks, in fulfilling the security expectations put tight control on the service quality, this includes having strong passwords, filling of captcha by the bank users, and customers finds it stressful, also, the answering of more than one personal questions at all times during each financial transaction makes the e-banking system stressful and boring, therefore, the expectation regarding service quality were not met.

There is therefore clash in fulfilling the e-banking expectation regarding service quality and perceived security. This is because, for tighter control on e-banking security, the service becomes clumsy and a bit stressful for customers. There is need to fill the captcha correctly, remember and input the correct answers to the personal security questions which are case sensitive, before any financial transactions can be completed. The bank management should therefore strike a balance between the e-banking security measures and the service quality, in order to ensure ease of the e-banking system.

Susranto (2017) confirmed that security expectation from user is not significant to user's satisfaction, that is, it's not confirmed. This is because the user feels higher level of risk transacting virtually compared direct transaction face to face with bank employees at the bank branch office. Users pre-acceptance attitude is based on cognitive believes, however, user pre-acceptance believe may be unrealistic. Reason, some factors that are basic and primary to the continual usage of a product or service, because, they did not meet the customers pre-acceptance specification, may not be confirmed (Bhattacherjee, 2001).

The impact of user's expectation confirmation on satisfaction of e-banking usage

Examining the impact of confirmation of the e-banking user's expectation to reflect the satisfaction level. The research question stated for this is research question two: Does Confirmation of expectation influences satisfaction of e-banking users?

From the result shown in the previous chapter, confirmation is positively correlated to satisfaction. This shows that confirmation is correlated to satisfaction. On this basis the decision on hypothesis H4 was justified.

Confirmation can explain the variance of satisfaction by 53.2%. This relates to the fact that there are other factor that causes user satisfaction that are not part of this study.

The impact of user's satisfaction on their continuance intention of e-banking usage

Examining the impact of user's satisfaction on their decision to continue using e – banking answers the third research question for this study: Does users Satisfaction affects continuance intension of the usage of e-banking?

From the analysis, shown in the previous chapter, satisfaction is positively correlated to continuance usage intention. Satisfaction is a strong predictor of continual usage, this reflect user affect (Bhattacherjee, 2001). From this study, satisfaction can explain 64% of the variance of continuance usage of e-banking, this confirmed Bhattacherjee (2001) IS user retention.

There are other factors that contributes to continuance usage apart from satisfaction. Alanazi (2013) explained that habit is another factor that contributes to continual usage aside satisfaction, The bank management should therefore focus more on user satisfaction, by, ensuring users expectations are met, particularly regarding the privacy procedures, in order to increase maximize confirmation and increase the level of the user satisfaction with e-banking use. This result also confirmed Chou et al. (2010) and Lee (2006) that satisfaction is a strong predictor of continuance intention. This means dissatisfaction is the condition for discontinuance of usage. The user satisfaction is therefore important before users will make decision to continue using electronic banking services (lee & Chang, 2009).

6.5 Study Implication

6.5.1 Theoretical Implication

By applying the expectation – confirmation model in accessing e-banking continuance usage intention, this study was able to contribute to knowledge This study contributes to the body of knowledge regarding usage of e-banking, many study have studied on the adoption and usage of e-banking, using the Technology Acceptance Model (TAM), Unified Theory of Acceptance and Use of Technology (UTAUT), theory of reasoned action and theory of planned behavior. This study expatiate the theoretical understanding of continual usage of e-banking by modifying the Expectation Confirmation Model (ECM). This is done by using three variables: expected service quality, perceived security and perceived privacy to measure user's expectations regarding e-banking usage.

6.5.2 Managerial Implication

The findings from this research has contributed to management practice in revealing the importance of e-banking usage and revealing the importance of privacy and security measures on the part of the bank top management in attracting more bank users to go virtual and to continue using the electronic means in bank transactions.

If the security and privacy measures are strong, the users will have more trust in the e-banking platform, there will not be fear of risk in the financial transactions, they will have the confidence that their personal data and other information given are secured. This will have a positive effect on banking management as the cost of electronic banking is

much cheaper compared to the traditional banking system, this will save them a lot of expenses and maximize their income. Larger customers will also be reached, greater and improved services will be boosted, as there will not be cross boundary barrier as customers form anywhere in the globe can transact with the bank. It will also improve the economy of the country, as the cash policy goal of achieving the cashless economy will be attained faster than imagined.

This will also foster improvement in the Nigeria's economy as transactions using liquid cash will reduce significantly and there will be more influx cash in the formal economy, this will improve taxation, as more individuals and firms will be tax compliant. This will also reduce fraud, corruption and fraudulent activities since financial transactions can easily be traced and improve more accountability in the government and public sectors as well as the non-government corporate sectors of the Nigerian's economy.

6.6 Limitations of the Study

Despite the insightful findings of this study, it has its limitations also. First, this study is about the continuance usage intention of e-banking in a developing country, Nigeria. More than half of the population still have no access to internet and the ones that have access to internet are not focused more on social media, this means, there is still a low awareness on e-banking, although the Automated Teller Machine is used widely, yet, the use of internet electronic means is very low.

Second, this study used cross sectional design in data collection, in which data are collected at one point in time, there is no time for follow up stages before data analysis,

Third, this study is not longitudinal as it has a specific period of completion, therefore, there is the time limit.

The data collection for this research is restricted to Nigerian students in Universiti Utara Malaysia. These are intellectuals, as majority of the respondents are masters and P.Hd students. Therefore, future research may increase the scope of the population, to include other respondents like the business men, market women, technicians and the older people so as to get wider respondents scope, that can be generalized.

6.7 Suggestions for Future Study

Instead of adopting cross sectional design method, future research may change this method, in order to have time for follow up response from respondents

Future research may employ the longitudinal design in carrying out this research (Schwab, 2005).

This study used quantitative methodology, other research may therefore adopt the quantitative methodology in carrying out future research.

Since the data population is Nigerian students in Universiti Utara Malaysia, therefore, future research may increase the scope of the population, so as to get wider respondents population. The independent variables for this study may also be extended for future research.

6.8 Conclusion

This study helps in understanding the expectation and satisfaction of users in assessing their intention in continuance usage of e-banking. The respondents for the study are the Nigerian students of one of Universiti Utara Malaysia (UUM) which is one of the public universities in Malaysia. The university has a high population of Nigerian students especially the Masters and Ph.D. students of at least 300 Nigerians. This, the result of the study can be applicable to other Nigerians. The result of the shows that the expectation of Nigerian concerning the service quality, security and privacy of e-banking is weakly confirmed, as the actual experience is below their expectation.

It is therefore, imperative that the management of Nigerian banks should take these issues into focus, in order for better customer satisfaction of the users of e-banking in Nigeria. If the users are satisfied, there will develop the intention of its continuance usage, which will be beneficial to the banks management as the cost of banking services will be significantly reduced and wider range of bank users will be attracted. This will help in fulfilling the cash policy goal on cashless economy which despite its establishment has not been effective in the country.

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